DATE: September 30, 1982
REVISION NO: 0

TABLE OF CONTENTS

DATE: September 30, 1982
REVISION NO: 0

PART A APPLICATION

(a) Original Part A Application

Submitted: 11/19/80

Please print or type in the unshaded areas only
(fill-in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-R0175

FORM 1 GENERAL

U.S. ENVIRONMENTAL PROTECTION AGENCY

GENERAL INFORMATION

Consolidated Permits Program

(Read the "General Instructions" before starting.)

I. EPA I.D. NUMBER: F O H D 0 0 4 2 9 4 3 5 1 (F/A) D (C)

LABEL ITEMS

- I. EPA I.D. NUMBER
- II. FACILITY NAME
- V. FACILITY MAILING ADDRESS
- VI. FACILITY LOCATION

PLEASE PLACE LABEL IN THIS SPACE

GENERAL INSTRUCTIONS

If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent *(the area to the left of the label space lists the information that should appear)*, please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI *(except VI-B which must be completed regardless)*. Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.

II. POLLUTANT CHARACTERISTICS

INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms.

SPECIFIC QUESTIONS	MARK 'X' YES	NO	FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)		X	
B. Does or will this facility *(either existing or proposed)* include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)		X	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)		X	
D. Is this a proposed facility *(other than those described in A or B above)* which will result in a discharge to waters of the U.S.? (FORM 2D)		X	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	X		
F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)		X	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)		X	
H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)		X	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	
J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)		X	

III. NAME OF FACILITY

1 SKIP: COLUMBUS COATED FABRICS

IV. FACILITY CONTACT

A. NAME & TITLE *(last, first, & title)*	B. PHONE *(area code & no.)*
2 ILG WILLIAM G SENIOR PROJ ENG	614 225 6336

297-6043

V. FACILITY MAILING ADDRESS

A. STREET OR P.O. BOX

3 PO BOX 208

B. CITY OR TOWN	C. STATE	D. ZIP CODE
4 COLUMBUS	OH	43216

VI. FACILITY LOCATION

A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER

5 1280 NORTH GRANT AVENUE

B. COUNTY NAME

FRANKLIN

C. CITY OR TOWN	D. STATE	E. ZIP CODE	F. COUNTY CODE (if known)
6 COLUMBUS	OH	43201	

ONTINUED FROM THE FRONT

II. SIC CODES (4-digit, in order of priority)

A. FIRST	B. SECOND
2295 (specify) Coated Fabrics, Not Rubberized	27 (specify)
C. THIRD	**D. FOURTH**
(specify)	27 (specify)

III. OPERATOR INFORMATION

A. NAME: BORDEN INC

B. Is the name listed in Item VIII-A also the owner? [X] YES [ ] NO

C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other", specify.)
F = FEDERAL, S = STATE, P = PRIVATE, M = PUBLIC (other than federal or state), O = OTHER (specify)
P (specify) Private

D. PHONE (area code & no.): A 614 225 4000

E. STREET OR P.O. BOX: 80 EAST BROAD STREET

F. CITY OR TOWN: COLUMBUS

G. STATE: OH

H. ZIP CODE: 43215

IX. INDIAN LAND

Is the facility located on Indian lands? [ ] YES [X] NO

V. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water): N

D. PSD (Air Emissions from Proposed Sources): 9 P

B. UIC (Underground Injection of Fluids): U

E. OTHER (specify): 9 MISC (specify) State Permits

C. RCRA (Hazardous Wastes):

E. OTHER (specify): 9 (specify)

VI. MAP

Attach to this application a topographic map of the area extending to at least one mile beyond property bounderies. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.

VII. NATURE OF BUSINESS (provide a brief description)

Manufacture of Coated Fabrics

VIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)	B. SIGNATURE	C. DATE SIGNED

COMMENTS FOR OFFICIAL USE ONLY

EPA Form 3510-1 (6-80) REVERSE

DATE: May 6, 1983
REVISION NO: 1

ITEM X FORM I ADDENDA

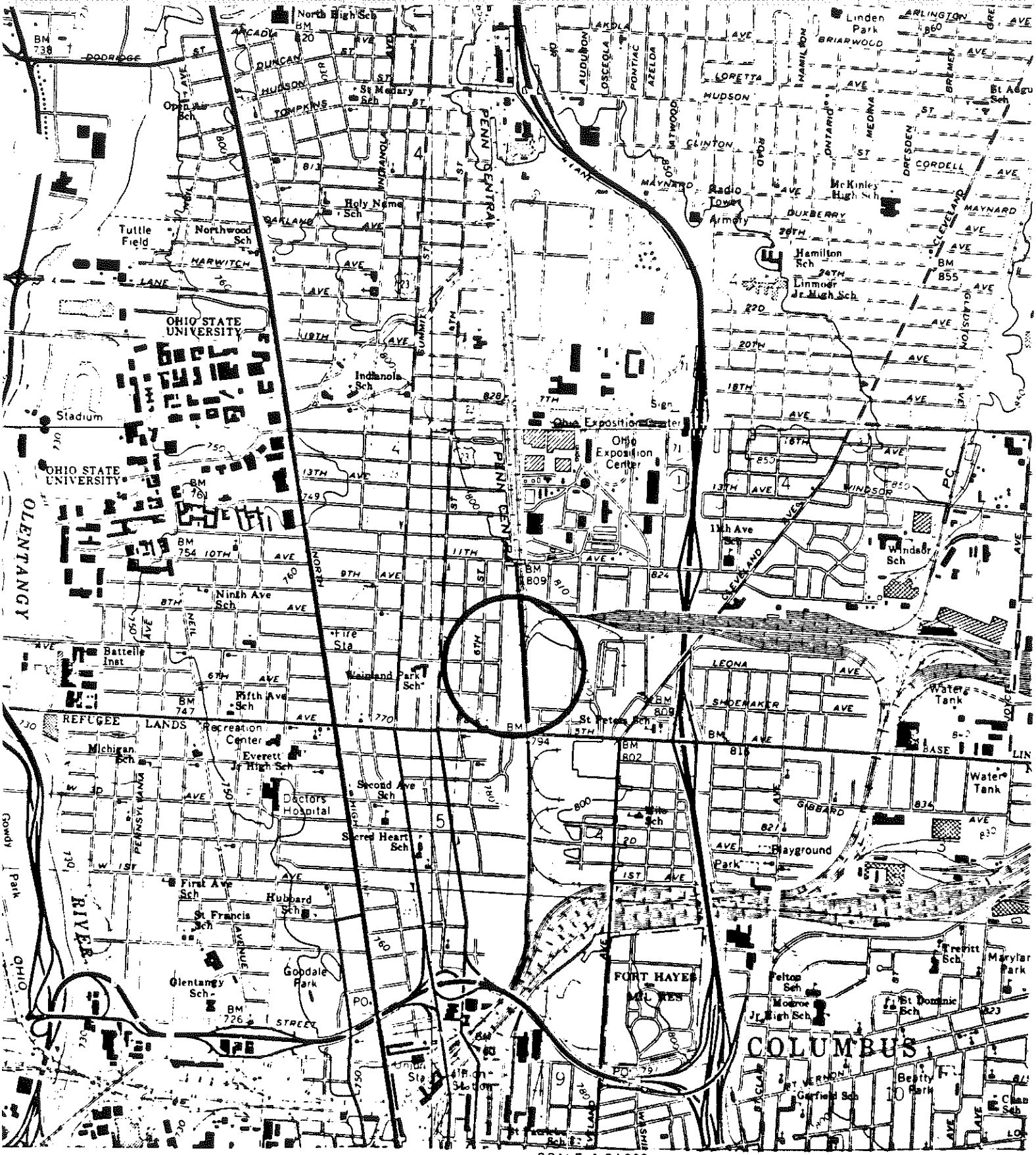
State Air Emission Permit Numbers:

0125040031P001
0125040031P002
0125040031P003
0125040031P004
0125040031P005
0125040031P007
0125040031P008
0125040031P009
0125040031P010
0125040031P011
0125040031P012
0125040031P013
0125040031P014
0125040031P015
0125040031P016
0125040031P017
0125040031P018
0125040031P019
0125040031P020
0125040031P023
0125040031P024
0125040031P026
0125040031P027
0125040031P028
0125040031P029
0125040031P030
0125040031P031
0125040031P032
0125040031P033
0125040031P034
0125040031P035
0125040031P036

0125040031B001
0125040031B002
0125040031B003

Application Nos.:

01-222
01-223
01-313



SCALE 1:24 000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER

CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

MN GN
2½° 44 MILS
1°19' 23 MILS

UTM GRID AND 1973 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

(fill—in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-S80004

FORM 3 RCRA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER

F	O	H	D	0	0	4	2	9	4	3	5	1	T/A	C
														1

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

[ ] 2. NEW FACILITY *(Complete item below.)*

C 8 — FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

YR.	MO.	DAY
2 9		

FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN

YR.	MO.	DAY

B. REVISED APPLICATION *(place an "X" below and complete Item I above)*

[ ] 1. FACILITY HAS INTERIM STATUS

[ ] 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES – CODES AND DESIGN CAPACITIES

A. PROCESS CODE – Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C).*

B. PROCESS DESIGN CAPACITY – For each code entered in column A enter the capacity of the process.

1. AMOUNT – Enter the amount.
2. UNIT OF MEASURE – For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER *(barrel, drum, etc.)*	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)*	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	Q

EXAMPLE FOR COMPLETING ITEM III *(shown in line numbers X-1 and X-2 below):* A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C DUP T/A C 1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
X-1	S02	600	G		5				
X-2	T03	20	E		6				
1	T04	2,700	U		7				
2	T04	1,200	E		8				
3	T01	22,200	U		9				
4	S01	10,450	G		10				

Continued from the front.

III. PROCESSES *(continued)*

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

Line #1 Solvent recovery is a two stage operation. In the first stage, solvent is removed from scrap ink. In the second stage, water introduced by the first operation is removed from the solvent.

Line #2 Plating discharge treated to precipitate chrome and copper which is then removed in throw away filters.

IV. DESCRIPTION OF HAZARDOUS WASTES

A. **EPA HAZARDOUS WASTE NUMBER** – Enter the four–digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four–digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. **ESTIMATED ANNUAL QUANTITY** – For each **listed waste** entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each **characteristic** or **toxic contaminant** entered in column A estimate the total annual quantity of all the non–listed waste*(s)* that will be handled which possess that characteristic or contaminant.

C. **UNIT OF MEASURE** – For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. **PROCESSES**

1. PROCESS CODES:
   For listed hazardous waste: For each listed hazardous waste entered in column A select the code*(s)* from the list of process codes contained in item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   For non–listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate all the processes that will be used to store, treat, and/or dispose of all the non–listed hazardous wastes that possess that characteristic or toxic contaminant.
   Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER – Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* – A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non–listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2				*included with above*

Continued from page 2.
NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

Form Approved OMB No. 158-S80004

EPA I.D. NUMBER (enter from page 1)	T/A C	FOR OFFICIAL USE ONLY	T/A C	
W 0 H D 0 0 4 2 9 4 3 5 1	1	W DUP	2	DUP

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)				D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	F001	850	P	S01				
2	F005	150	T	T04	S01			
3	F002							Included with above
4	F003							Included with above
5	F006	15	T	T01	T04	S01		
6	F009							Included with above
7	P001	500	P	S01				
8	P029	200	P	S01				
9	P030							Included with above
10	P090	100	P	S01				
11	P098	500	P	S01				
12	P106	500	P	S01				
13	U013	1,000	P	S01				
14	U151	100	P	S01				
15	D001	1,000	P	S01				
16	D002	3.0	T	S01				
17	D005	1.0	T	S01				
18	D006							Included with above
19	D007	21.0	T	S01				
20	D008							Included with above
21	D005	105	T	S01				
22	D006							Included with above
23	D007							Included with above
24	D008							Included with above
25								
26								

EPA Form 3510-3 (6-80)

CONTINUE ON REVERSE

ntinued from the front.

V. DESCRIPTION OF HAZARDOUS WASTES *(continued)*

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

EPA I.D. NO. *(enter from page 1)*

												T/A	C
O	H	D	0	0	4	2	9	4	3	5	1		6

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail).*

VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground–level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail).*

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE *(degrees, minutes, & seconds)*			LONGITUDE *(degrees, minutes, & seconds)*		
39	59	23	82	59	43

VIII. FACILITY OWNER

[X] A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. *(area code & no.)*

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE
	C G		

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED

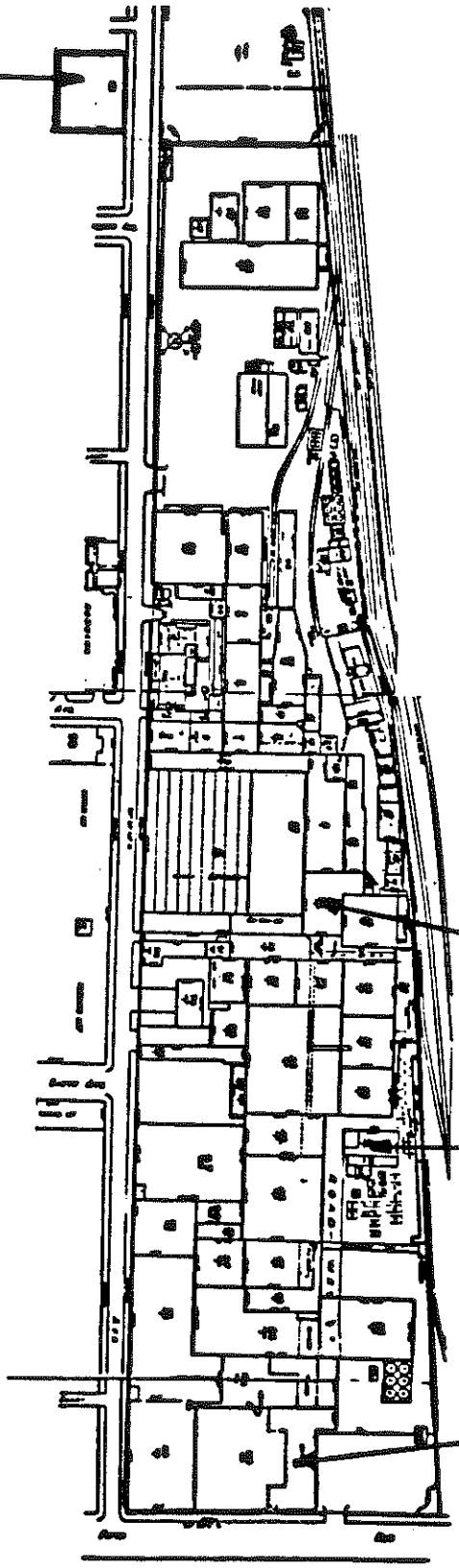
X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED

Form Approved OMB No. 158-S80004

V. FACILITY DRAWING *(see page 4)*



NOTE:
501 STORAGE
III C - LINE 4
INSIDE STORAGE

APPROX. SCALE: 1" = 834 FT.

(b) Revised Part A Application - 9/30/82

The originally submitted Part A application has been revised, as shown, due to further review of waste handling on-site and clarification of regulations. The following changes were made to the original application:

(1) Page 1 of 5

- line 1, TO4 - The solvent still is an exempt recovery facility.
- line 2, TO4 - The electroplating tank treats waste before discharge into the city system and is exempt.
- line 3, TO1 - This treatment facility was anticipated to have been constructed at the time of Part A submission; it has not been constructed, and is, thus, omitted.
- line 4, S01 - The process design capacity is increased to 24,750 gallons.

(2) Page 3 of 5

The original application listed materials that are not wastes, but are constituents of raw materials on-site. On the revised application, the realm of materials is reduced to actual generated wastes

The following changes have been made on the September 30, 1982 revision:

- line 1 (F001) has been omitted - no degreasing operations are in the facility.
- line 2 has been moved to line 1.
- line 3 has been revised as shown (and moved to line 2).
- line 4 has been revised as shown (and moved to line 3).
- line 5 has been moved to line 4.
- line 6 has been moved to line 5.
- line 7 has been revised as shown (and moved to line 6).

(3) A current photograph of the drum storage facility is included.

The following change has been made on the May 6, 1983 revision #1 (sheet 15) of the Part A application:

- line 5 (F009) has been omitted.
- line 6 has been moved to line 5.

Please print or type in the unshaded areas only
(fill—in areas are spaced for elite type, i.e., 12 characters/inch).

Form Approved OMB No. 158-S80004

FORM 3 RCRA

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE PERMIT APPLICATION

Consolidated Permits Program

(This information is required under Section 3005 of RCRA.)

I. EPA I.D. NUMBER

S												T/A	C
F	O	H	D	0	0	4	2	9	4	3	5	1	I

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (yr., mo., & day)	COMMENTS
23	24 - 29	

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below *(mark one box only)* to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

[X] 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)* (71)

[ ] 2. NEW FACILITY *(Complete item below.)* (71)

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*

C	YR.	MO.	DAY
8	2 9		
15	73 74	75 76	77 78

FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OPERATION BEGAN OR IS EXPECTED TO BEGIN

YR.	MO.	DAY
73 74	75 76	77 78

B. REVISED APPLICATION *(place an "X" below and complete Item I above)*

[X] 1. FACILITY HAS INTERIM STATUS (72)

[ ] 2. FACILITY HAS A RCRA PERMIT (72)

III. PROCESSES — CODES AND DESIGN CAPACITIES

A. PROCESS CODE — Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code*(s)* in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the form *(Item III-C)*.

B. PROCESS DESIGN CAPACITY — For each code entered in column A enter the capacity of the process.

1. AMOUNT — Enter the amount.
2. UNIT OF MEASURE — For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER *(barrel, drum, etc.)*	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D79	GALLONS OR LITERS
LANDFILL	D80	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D81	ACRES OR HECTARES
OCEAN DISPOSAL	D82	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83	GALLONS OR LITERS

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER *(Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)*	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	Q

EXAMPLE FOR COMPLETING ITEM III *(shown in line numbers X-1 and X-2 below)*: A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

S												T/A	C
C	D	U	P										1

LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT (specify)	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY 1. AMOUNT	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE (enter code)	FOR OFFICIAL USE ONLY
	16 - 18	19 - 27	28	29 - 32		16 - 18	19 - 27	28	29 - 32
X-1	S 0 2	600	G		5				
X-2	T 0 3	20	E		6				
1	S 0 1	24,750	G		7				
2					8				
3					9				
4					10				
	16 - 18	19 - 27	28	29 - 32		16 - 18	19 - 27	28	29 - 32

Continued from the front.

III. PROCESSES *(continued)*

C. SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESSES *(code "T04")*. FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

IV. DESCRIPTION OF HAZARDOUS WASTES

A. **EPA HAZARDOUS WASTE NUMBER** – Enter the four–digit number from 40 CFR, Subpart D for each listed hazardous waste you will handle. If you handle hazardous wastes which are not listed in 40 CFR, Subpart D, enter the four–digit number*(s)* from 40 CFR, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.

B. **ESTIMATED ANNUAL QUANTITY** – For each **listed waste** entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each **characteristic** or **toxic contaminant** entered in column A estimate the total annual quantity of all the non–listed waste*(s)* that will be handled which possess that characteristic or contaminant.

C. **UNIT OF MEASURE** – For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. **PROCESSES**

1. PROCESS CODES:
   For listed hazardous waste: For each **listed** hazardous waste entered in column A select the code*(s)* from the list of process codes contained in Item III to indicate how the waste will be stored, treated, and/or disposed of at the facility.
   For non–listed hazardous wastes: For each characteristic or toxic contaminant entered in column A, select the code*(s)* from the list of process codes contained in Item III to indicate **all** the processes that will be used to store, treat, and/or dispose of all the non–listed hazardous wastes that possess that characteristic or toxic contaminant.
   Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of Item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code*(s)*.

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER – Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B,C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other EPA Hazardous Waste Number that can be used to describe the hazardous waste.

EXAMPLE FOR COMPLETING ITEM IV *(shown in line numbers X-1, X-2, X-3, and X-4 below)* – A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non–listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. EPA HAZARD. WASTE NO *(enter code)*	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE *(enter code)*	D. PROCESSES 1. PROCESS CODES *(enter)*	D. PROCESSES 2. PROCESS DESCRIPTION *(if a code is not entered in D(1))*
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2				*included with above*

Continued from page 2.
NOTE Photocopy this page before completing if you have more than 26 wastes to list.

DATE: September 30, 1983
REVISION NO. 2
Form Approved OMB No 158-S80004

EPA I.D. NUMBER (enter from page 1): W O H D 0 0 4 2 9 4 3 5 1

FOR OFFICIAL USE ONLY: W DUP 2 DUP

IV. DESCRIPTION OF HAZARDOUS WASTES (continued)

LINE NO.	A. EPA HAZARD. WASTE NO (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
1	F005	150	T	S01	
2	F002	*450	P		Included with above
3	F003	*450	P		Included with above
4	F006	15	T	S01	
5	D006	63	T	S01	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					

*This waste has never been generated + this quantity represents an estimated generation rate.

EPA Form 3510-3 (6-80)

CONTINUE ON REVERS

Continued from the front.

IV. DESCRIPTION OF HAZARDOUS WASTES *(continued)*

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM ITEM D(1) ON PAGE 3.

EPA I.D. NO. *(enter from page 1)*

													T/A	C
F	O	H	D	0	0	4	2	9	4	3	5	1		6

V. FACILITY DRAWING

All **existing** facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail).*

VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground–level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail).*

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*

VIII. FACILITY OWNER

☐ A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. *(area code & no.)*
E Borden Inc.	614-225-4292

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE
F 180 East Broad Street	G Columbus	OH	43215

IX. OWNER CERTIFICATION

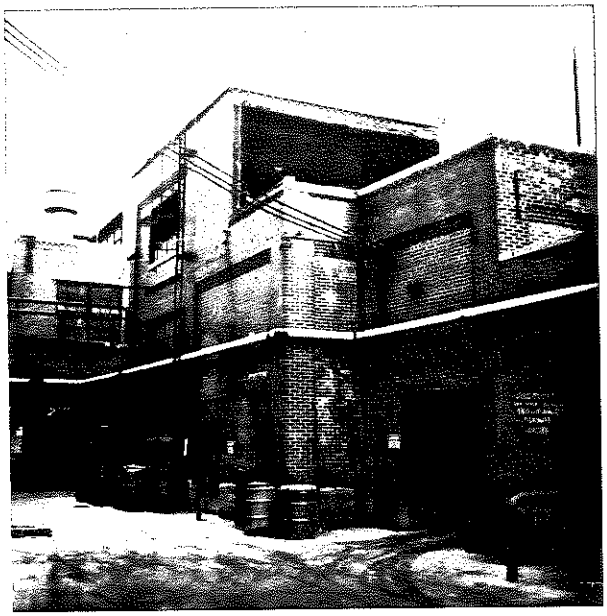
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED
W. Bailey Barton Director of Environmental Affairs	W. Bailey Barton	9-27-82

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME *(print or type)*	B. SIGNATURE	C. DATE SIGNED



Photograph of Hazardous Waste Storage Building

September 22, 1982

PART B APPLICATION

PART B APPLICATION

(a) General Information Requirements

(1) A General Description of the Facility

This section provides a general description of the Columbus Coated Fabrics Company and, most specifically, the Hazardous Waste Storage Building within the property lines of the company. This description is intended to acquaint the permit application reviewer/permit writer with an overview of the facility. More complete details can be found in other parts of this permit application.

(i) General Description

Columbus Coated Fabrics Company is located within the city limits of Columbus, Ohio, approximately two miles north of the center of the city. The street address is:

Columbus Coated Fabrics
1280 North Grant Avenue
Franklin County
Columbus, Ohio 43201

(ii) The mailing address is:

Columbus Coated Fabrics
P.O. Box 208
Columbus, Ohio 43216

(iii) This facility is primarily a manufacturer of decorative vinyl products. Hazardous wastes are generated at:

1. The solvent recycling still, as still bottoms.
2. At the Banbury Mixes on the PC-2, PC-3 and PC-4 calender lines.

3. In the limestone pit sump in the Plating Department.

The still bottom waste (#1 above) is the by-product of recycling the no longer used inks and waste solvents in order to recover the solvent for reuse.

The dust stop oil and plasticizer residue (#2 above) is generated from the leakage thru the seals of the Banbury mixers on the PC-2, PC-3 and PC-4 calender lines.

The plating pit sludge (#3 above) is collected at the bottom of a limestone pit in the Plating Department.

The contact and party responsible for the hazardous waste management activities at Columbus Coated Fabrics is:

William G. Ilg
Senior Project Engineer
614-225-6336

(19) Topographic Map and Other Required Maps

Figure #1 is a map showing the 100 year floodplain area and surface waters. Figure #2 is a topographic map showing the facility boundaries, buildings, waste storage building, surrounding land use and other details. Figure #3 is a Wind Rose. Figure #4 is a facility map showing property lines, buildings, roadways and other details. Figure #5 is a plan view of the hazardous waste storage building. Figure #6 is a seriatim view of the hazardous waste storage building.

The scale on all maps is 1 inch equals 200 ft except the 100 year floodplain map. Also, the topographic map with contour lines is at an interval of 10 ft.

The contour internal was discussed with K. Homer at Region V EPA, the permit application reviewed, and the EPA considered the submission of the map with the 10 ft. contour internals to be acceptable since the ground area in the area of the facility is quite level.

(i) Map Scale and Date

Figures 1 thru 6 all contain scale and/or date as applicable.

(ii) 100 Year Floodplain

Figure #1 is the U.S. Department of Housing and Urban Development Flood Hazard Boundry Map.

A discussion with Region V EPA resulted in the approval for the submission of this scale of 1 inch equals 1,000 ft. The floodplain as shown substantially coincides with the map presently being drafted at the State of Ohio Department of Natural Resources of the 100 year floodplain areas.

(iii) Surface Waters

Are shown on the 100 year floodplain map (Figure #1).

(iv) Surrounding Land Uses

Shown on Figure #2.

(v) Wind Rose

Figure #3 shows an annual Wind Rose of meteorological data collected for the year 1975 at the weather station #14821 at Port Columbus International Airport 5.3 miles east of the Columbus Coated Fabrics facility in Columbus, Ohio.

(vi) Map Orientation

Figures #1 thru 6 all contain map orientation.

(vii) Legal Boundaries

Figure #2 indicates the legal boundaries of the facility.

(viii) Access Control

Figure #4 shows the fences surrounding the facility including Gate #5 which is the gate at which the hazardous waste leaves the facility.

The entire facility is surrounded by a cyclone fence with security barbed wire. Guard houses are situated at all the entrances to the plant. Employees must show identification to obtain access; visitors must sign in and out and wear a visitor's badge. Access control is discussed in further detail in Section (4) "Security Requirements".

(ix) Inspection and Withdrawal Wells

The site has no injection wells.

There are three withdrawal wells in the facility (shown in Figure # 2) of which only two are active at the present time. The three are located in the Boiler House, adjacent to the north exterior wall of the Lab building and the PC-4 Calender Building.

The withdrawal wells at the exterior wall of the Lab building and the PC-4 Calender building are the only active wells at present. This water is used only for non-contact cooling.

(x) Buildings; Treatment, Storage or Disposal Operations; or Other Structures

Figure #4 shows the building and structures on the property as well as the Hazardous Waste storage building.

Recreation Areas: Not applicable.

Access and Internal Roads: Figure #4 shows the roads within the plant area and the one road leading into the hazardous waste storage building.

Storm & Sanitary Sewers: The main sewers are shown on Figure #4. The sewer system within and without the plant facility are separated into Storm & Sanitary Sewers. All internal plant drainage (domestic and process sewage) drains to the sanitary sewers. The roof drains are mostly piped directly to the city storm sewer system. Some roof drains are included with ground water drainage from the facility to the storm sewers on Grant Avenue and 5th Avenue.

There are no process sewers at this facility.

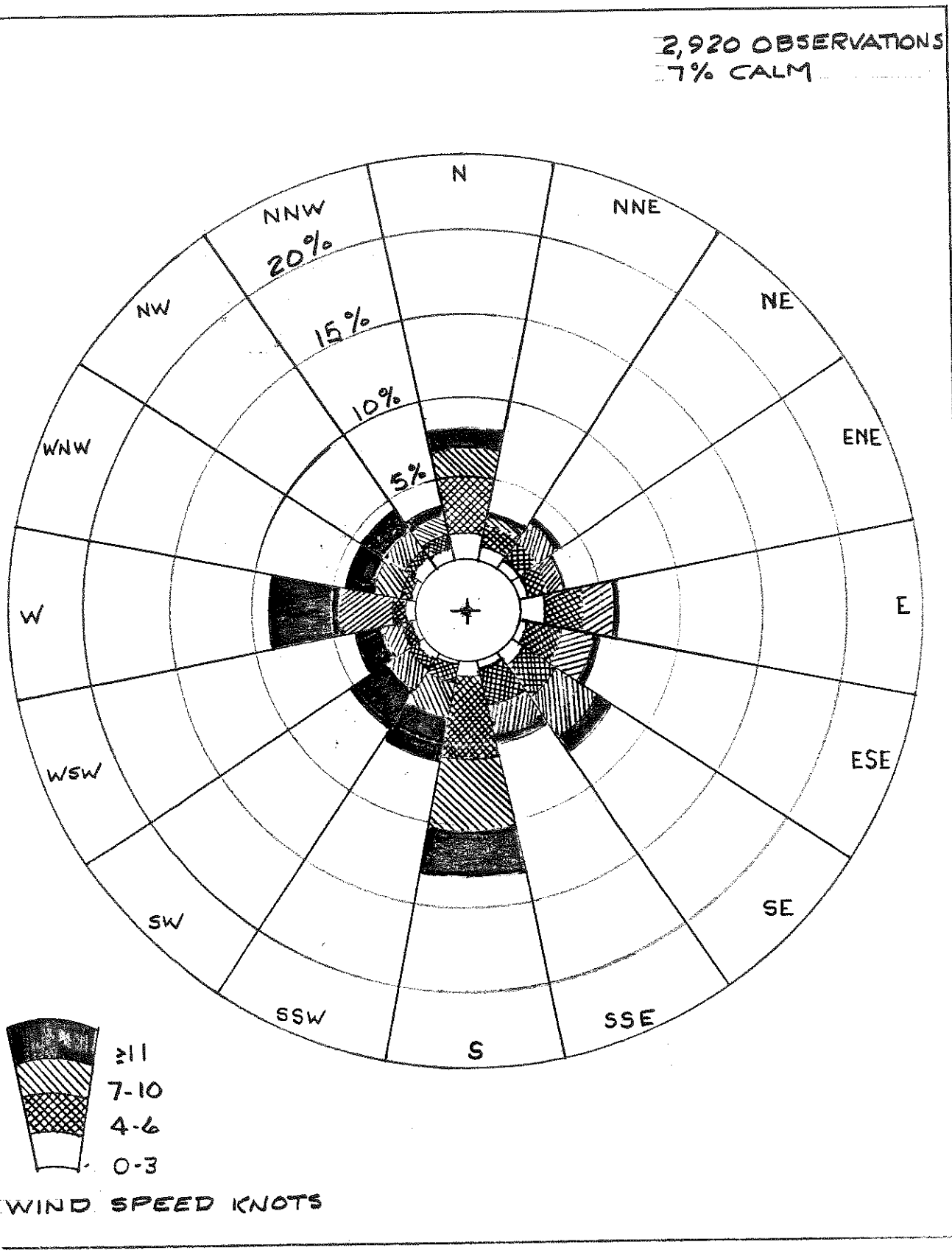
Loading and unloading area is shown in Figure #4 and further described in Section (10) "Traffic Patterns".

Fire Control facilities are described on Page # of the Emergency Action Plan.

Surface Waters: The only surface waters are the Olentangy River approximately 1.1 miles west of the facility, and Alum Creek approximately 2.3 miles east of the facility. These waters are shown on Figure #1.

General Drainage in the property is toward Grant Avenue and 5th Avenue. The facility is not within any 100 year floodplain area. There is no run on at the storage building since the building is enclosed and roofed with at least a 4 inch curb at exits and entrances.

The Hazardous Waste Storage Building is located and shown in Figures #2 and #4.



WIND ROSE

FIGURE 3

(2) Hazardous Waste Analyses

Following are independent lab analyses of the Columbus Coated Fabrics Hazardous Wastes in Pages #33, 34, 35 & 36.

(i) Solvent Still Bottoms - Solid Form

(a) Are as described in lab analysis on Pg. #33.

(b) These still bottoms are generated at the solvent still located as point "A" on map Pg. #32c.

(c) The basis for the hazard designation is EP toxicity and ignitibility.

(1) EP Toxicity - excess the max. allowable lead concentration.

(2) Ignitability is 54°F and 130°C.

(d) These still bottoms are a listed hazardous waste - F005 and carries an assigned CECOS Hazardous Waste number of 1271A.

(ii) Solvent Still Bottoms - Liquid Form

(a) Are as described in lab analysis on Pg. #34.

(b) These liquid still bottoms are generated at the solvent still located as point "A" on map Pg. #32c.

(c) These liquid still bottoms are generated at the solvent still. They are produced in the approximate ratio of 1 liquid drum to 65 solid drums.

(d) The basis for the hazard designation is EP toxicity and ignitability.

(1) EP toxicity - exceeds the max. allowable lead and cadmium concentration.

(2) Ignitability is <22°F and <72°C.

(e) These still bottoms are a listed hazardous waste - F-005 and carries an assigned Ross Incineration Hazardous Waste number of WPS #5485.

(iii) Dust Stop Oil and Plasticizer Residue

(a) Are as described in lab analysis on Pg. #35.

(b) This oil and residue is generated at the dust stops of the Banbury mixers located as point "B" on map Pg. #32c.

(c) The basis for the hazard designation is EP toxicity and ignitability.

(1) EP toxicity - exceeds the maximum allowable cadmium concentration.

(d) This waste carries assigned Hazardous Waste number as follows:

(1) Oil portion - Systech Hazardous Waste #STC-14.2007.

(2) Plasticizer Residue Portion - CECOS Hazardous Waste #1271-C

(iv) Limestone Sump Plating Residue

(a) As described in lab analysis on Pg. #36.

(b) This plating sump residue is generated in the sump located as point "C" on map Pg. #32c.

(c) The basis for the hazard designation is EP toxicity.

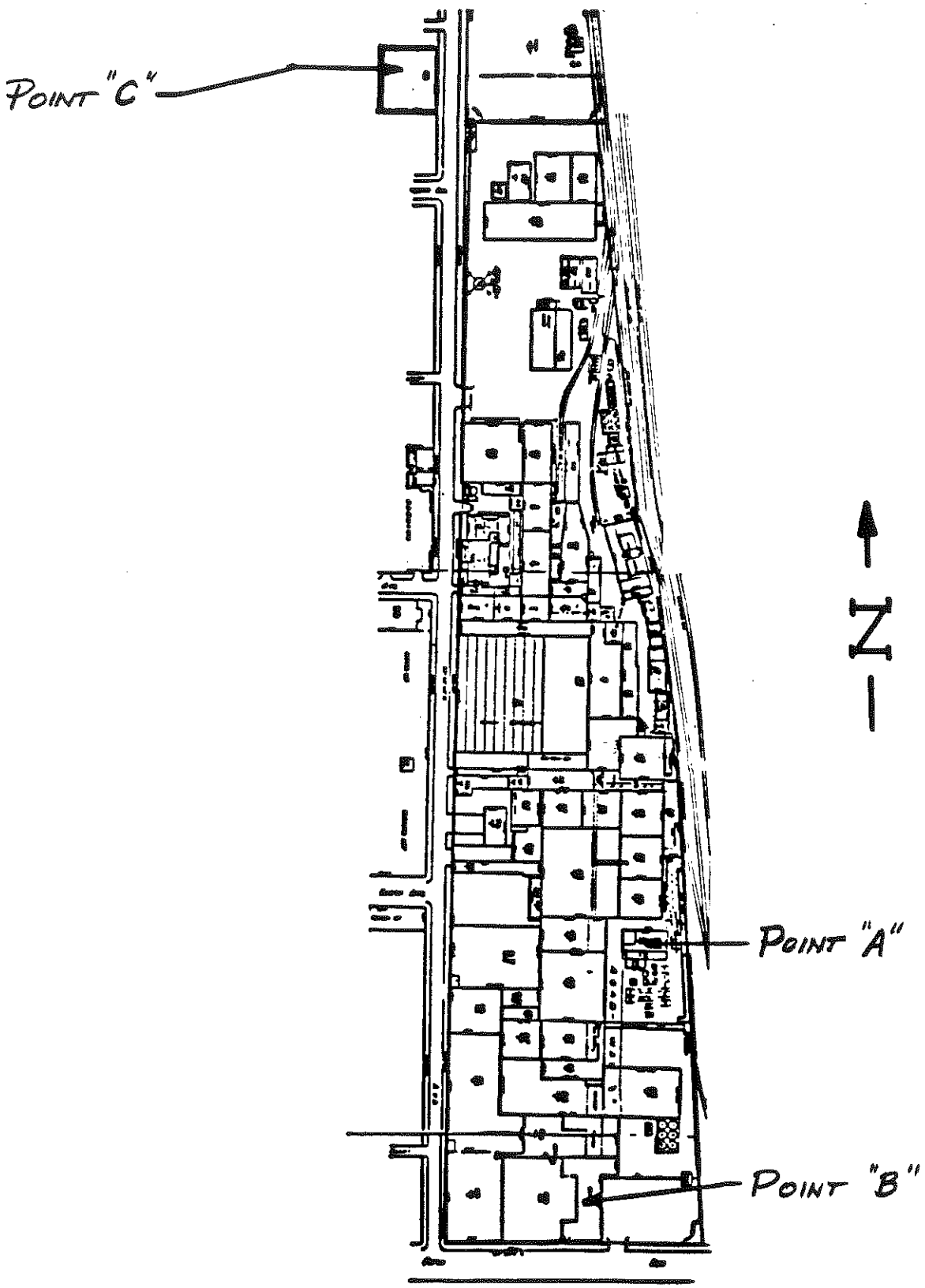
(1) EP toxicity - exceeds the maximum allowable chromium concentration

(d) The limestone sump plating residue is a listed hazardous waste - F006, and carries an assigned Systech Hazardous Waste number of STC 14-5067.

(e) Cyanide nor any other reactive waste material cannot enter this process waste.

FIGURE 6a

DATE: February 4, 1983
REVISION NO.: 0



APPROX. SCALE: 1" = 834 FT.

DATE: September 30, 1982
REVISION NO: 0

STILSON LABORATORIES, INC.
170 NORTH HIGH STREET
COLUMBUS OHIO 43215
PHONE - 614-228-4385

BORDEN INC.-COLS. COATED FABRICS
1280 N. GRANT AVE.
COLUMBUS, OHIO
BILL ILG

LAB NO. 112
JOB 92-5033-24
DATE DEC. 18, 81

LOCATION COLLECTED BORDEN SOLVENT STILL BOTTOMS - SOLID FORM

PRESERVATIVES USED -

DATE COLLECTED - - - DEC. 2, 81

TIME COLLECTED - - - 0000

FIELD PH - - - - - -

DATE RECEIVED - - - DEC. 3, 81

TEST	VOL. (ML.)	DILTN FACT.	RESULT	UNIT
IGNITABILITY			54 130	C/F
ARSENIC			<0.005	MG/L
BARIUM			1.5	MG/L
CADMIUM			<0.1	MG/L
CHROMIUM			0.7	MG/L
LEAD			7.9	MG/L
MERCURY			<0.0005	MG/L
SELENIUM			<0.005	MG/L
SILVER			<0.1	MG/L

PROJECT MANAGER Thomas A. Flippo

(THOMAS A. FLIPPO)

DATE: September 30, 1982
REVISION NO: 0

STILSON LABORATORIES, INC.
170 NORTH HIGH STREET
COLUMBUS OHIO 43215
PHONE - 614-228-4385

BORDEN INC.-COLS. COATED FABRICS
1280 N. GRANT AVE.
COLUMBUS, OHIO
BILL ILG

LAB NO. 132
JOB 92-5033-26
DATE FEB. 18, 82

LOCATION COLLECTED CCF28 LIQ. STILL BOT.

PRESERVATIVES USED -

DATE COLLECTED - - - FEB. 1, 82

TIME COLLECTED - - - 0000

FIELD PH - - - - - -

DATE RECEIVED - - - FEB. 2, 82

TEST	VOL. (ML)	DILTN FACT.	RESULT	UNIT
CORROSIVITY				PH-SU
IGNITABILITY			<22 72	C/F
ARSENIC			<0.005	MG/L
BARIUM			<1.0	MG/L
CADMIUM			2.4	MG/L
CHROMIUM			0.22	MG/L
LEAD		10	14.0	MG/L
MERCURY				MG/L
SELENIUM			<0.005	MG/L
SILVER			<0.1	MG/L

PROJECT MANAGER Thomas A. Flippo

(THOMAS A. FLIPPO)

DATE: September 30, 1982
REVISION NO: 0

Stilson Laboratories, Inc.
Columbus and Cleveland, Ohio

ADDRESS REPLY TO: 170 N. HIGH ST. COLUMBUS, OHIO 43216
PHONE: 614/228-4388

E.P. TOXICITY
40 CFR 261.24

Client: Borden, Inc.
Columbus Coated Fabrics
1280 Grant Avenue
Columbus, Ohio 43201
Attn: Bill Ilg

Lab Number 8450
Job Number 92-5033-19
Date Reported 12/3/80

Location Collected Borden-PC 3 DUST STOP OIL AND PLASTICIZER RESIDUE
Date Collected 11/19/80
e Received 11/19/80

EPA Hazardous Waste No.	Contaminant	Result milligrams/liter	Maximum Concentration milligrams/liter
D004	Arsenic		5.0
D005	Barium	80.	100.0
D006	Cadmium	6.0	1.0
D007	Chromium	< .1	5.0
D008	Lead	2.2	5.0
D009	Mercury		0.2
D010	Selenium		1.0
D011	Silver		5.0
D012	Endrin		0.02
D013	Lindane		0.4
D014	Methoxychlor		10.0
D015	Toxaphene		0.5
D016	2,4-D		10.0
D017	2,4,5-TP Silvex		1.0

DATE: September 30, 1982

STILSON LABORATORIES, INC
170 NORTH HIGH STREET
COLUMBUS OHIO 43215
PHONE - 614-228-4385

REVISION NO: 0

COLS. COATED FABRICS-BORDEN, INC
F.O. BOX 208
COLUMBUS, OHIO 43216
ACCOUNTS PAYABLE

LAB NO. 48
JOB 92-5033-24
DATE AUG. 31, 81

LOCATION COLLECTED LIMESTONE SUMP CCF-23

PRESERVATIVES USED -

DATE COLLECTED - - - JULY 27, 81

TIME COLLECTED - - - 0000

FIELD PH - - - - - -

DATE RECEIVED - - - AUG. 7, 81

TEST	VOL. (ML)	DILTN FACT.	RESULT	UNIT
ARSENIC			<0.005	MG/L
BARIUM			<1.0	MG/L
CADMIUM			<0.1	MG/L
CHROMIUM			11.6	MG/L
LEAD			<0.1	MG/L
MERCURY			<0.0005	MG/L
SELENIUM			<0.005	MG/L
SILVER			<0.1	MG/L

PROJECT MANAGER Thomas A. Flippo (GLH)

(THOMAS A. FLIPPO)

(3) Waste Analysis Plan

(i) A copy of the CCF Waste Analysis Plan is shown on Page 39.

(ii) Table I shows Hazardous Waste Parameters and Rationale. EP Toxicity and Ignitability will be tested annually for the listed hazardous wastes.

(iii) Sampling Methods are as follows:

All Wastes are sampled by the sampling methods described in "Test Methods for Evaluating Solid Waste". Physical/ Chemical Methods U.S. EPA SW846 Second Edition. Equipment used for sampling is as described on Pg. 38c (from Table I SW-846).

Dust Stop/Still Bottom Wastes - Solid Wastes - Samples as taken from (6) random drums with a trier as shown on Pg. 38d (from SW-846) by the procedure described on Pg. 38e (from SW-846). A composite is then sent to the lab for analysis in glass jars. No preservatives are required or used.

Dust Stop/Still Bottom Wastes - Liquid Wastes - Samples are taken from (6) random drums with a Coliwasa as shown on Pg. 38f (from SW-846) by the procedure described on Pg. 38g (from SW-846). A composite is then sent to the lab for analysis in glass jars. No preservatives are required or used.

Electroplating Waste - A grab sample is taken from the pit with a Dipper as shown on Pg. 38h (from SW-846) by the procedure described on Pg. 38i (from SW-846). The sample is then sent to the lab in a glass jar. No preservatives are required or used.

(iv) Solids Test

A stick is pushed into the material and removed. If any free liquid drops off the stick after removal, it is considered liquid. If the stick is dry or the sludge is of mayonaise consistency, the material is considered solid. If a small quantity of free liquid exists, absorbent material and/or ashes are added and stirred into the sludge until it is determined by the stick test the material is solid.

This test is as prescribed by the landfill operator (CECOS Inc., Williamsburg, Ohio).

(v) Sample Log

A sample log is maintained stating type of sample taken, method used to obtain sample and the date it was sent to the Stilson Laboratory for analysis.

DATE: May 6, 1983
REVISION NO.: 0

STILSON Laboratories, Inc.
170 NORTH HIGH ST., COLUMBUS, OHIO 43215 614/228-4385

April 20, 1983

Borden, Inc.
Columbus Coated Fabrics
1280 Grant Avenue
Columbus, Ohio 43201

Attn: Mr. Bill Ilg

Dear Bill:

This letter is to inform you that all hazardous waste analyses have been performed in accordance with SW-846, Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods.

Please call me at once if further information is required.

Sincerely,

STILSON LABORATORIES, INC.

Thomas A. Flippo
Biologist

TAF/lkd

DATE: September 30, 1983
REVISION NO: 0

STILSON Laboratories, Inc.
170 NORTH HIGH ST., COLUMBUS, OHIO 43215 614/228-4385

September 02, 1983

Borden, Inc.
Columbus Coated Fabrics
1280 Grant Avenue
Columbus, Ohio 43201

Attn: Bill Ilg

Re: SW 846, Test Methods for Evaluating Solid Wastes

Dear Mr. Ilg:

The following is a list of test parameters and their corresponding method numbers:

PARAMETERS	METHOD NUMBERS
E. P. Toxicity	1310
Ignitibility	1010
Corrosivity	9040
Arsenic	7060
Barium	7080
Cadmium	7130
Chromium	7190
Lead	7420
Mercury	7470
Selenium	7740
Silver	7760

All of the above methods appear in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods-SW846, 2nd. Edition. USEPA.

If you have any additional questions, please do not hesitate to call.

Sincerely,

STILSON LABORATORIES, INC.

Thomas A. Flippo

TAF/lkd

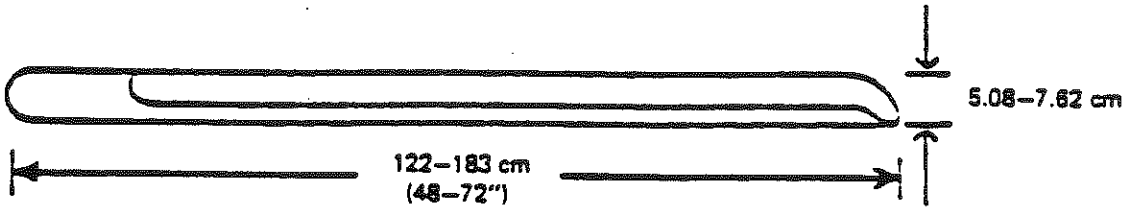
TABLE 1. SAMPLING EQUIPMENT FOR PARTICULAR WASTE TYPES

	Waste location or container								
Waste type	Drum	Sacks and bags	Open bed truck	Closed bed truck	Storage tanks or bins	Waste files	Ponds, lagoons, & pits	Conveyor belt	Pipe
Free flowing liquids and slurries	Coliwasa	N/A	N/A	Coliwasa	Weighted bottle	N/A	Dipper	N/A	Dipper
Sludges	Trier	N/A	Trier	Trier	Trier	a	a		
Moist powders or granules	Trier	Trier	Trier	Trier	Trier	Trier	Trier	Shovel	Dipper
Dry powders or granules	Thief	Thief	Thief	Thief	Thief	Thief	Thief	Shovel	Dipper
Sand or packed powders and granules	Auger	Auger	Auger	Auger	a	a	a	Dipper	Dipper
Large grained solids	Large Trier	Large Trier	Large Trier	Large Trier	Large Trier	Large Trier	Large Trier	Trier	Dipper

[a]This type of sampling situation can present significant logistical sampling problems, therefore sampling equipment must be specifically selected or designed based on site and waste conditions. No general statement about appropriate sampling equipment can be made.

DATE: September 30, 1983
REVISION NO: 0

14 / SAMPLING - Implementation



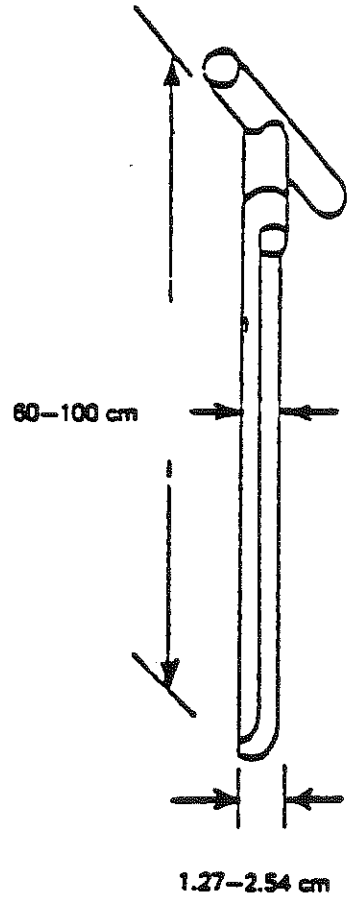


Figure 5. Sampling triers.

Procedure

1. Clean trier.

2. Insert trier into waste material 0 to 45° from horizontal. Rotate trier to cut a core of the waste. Remove trier with concave side up and transfer sample to container.

1.2.1.6 Auger

Scope and Application

An auger consists of sharpened spiral blades attached to a hard metal central shaft. An auger samples hard or packed solid wastes or soil.

Apparatus

Augers are available at hardware and laboratory supply stores.

Procedure

1. Clean sampler.

2. Bore a hole through the middle of an aluminum pie pan large enough to allow the blade of the auger to pass through. The pan will be used to catch the sample brought to the surface by the auger.

3. Place pan against the sampling point. Auger through the hole in the pan until the desired sampling depth is reached. Back off the auger and transfer the sample in the pan and adhering to the auger to a container. Spoon out the rest of the loosened sample with a sample trier.

1.2.1.7 Scoop and Shovel

Scope and Application

Scoops and shovels are used to sample granular or powdered material in bins, shallow containers and conveyor belts.

Apparatus

Scoops are available at laboratory supply houses. Flat-nosed shovels are available at hardware stores.

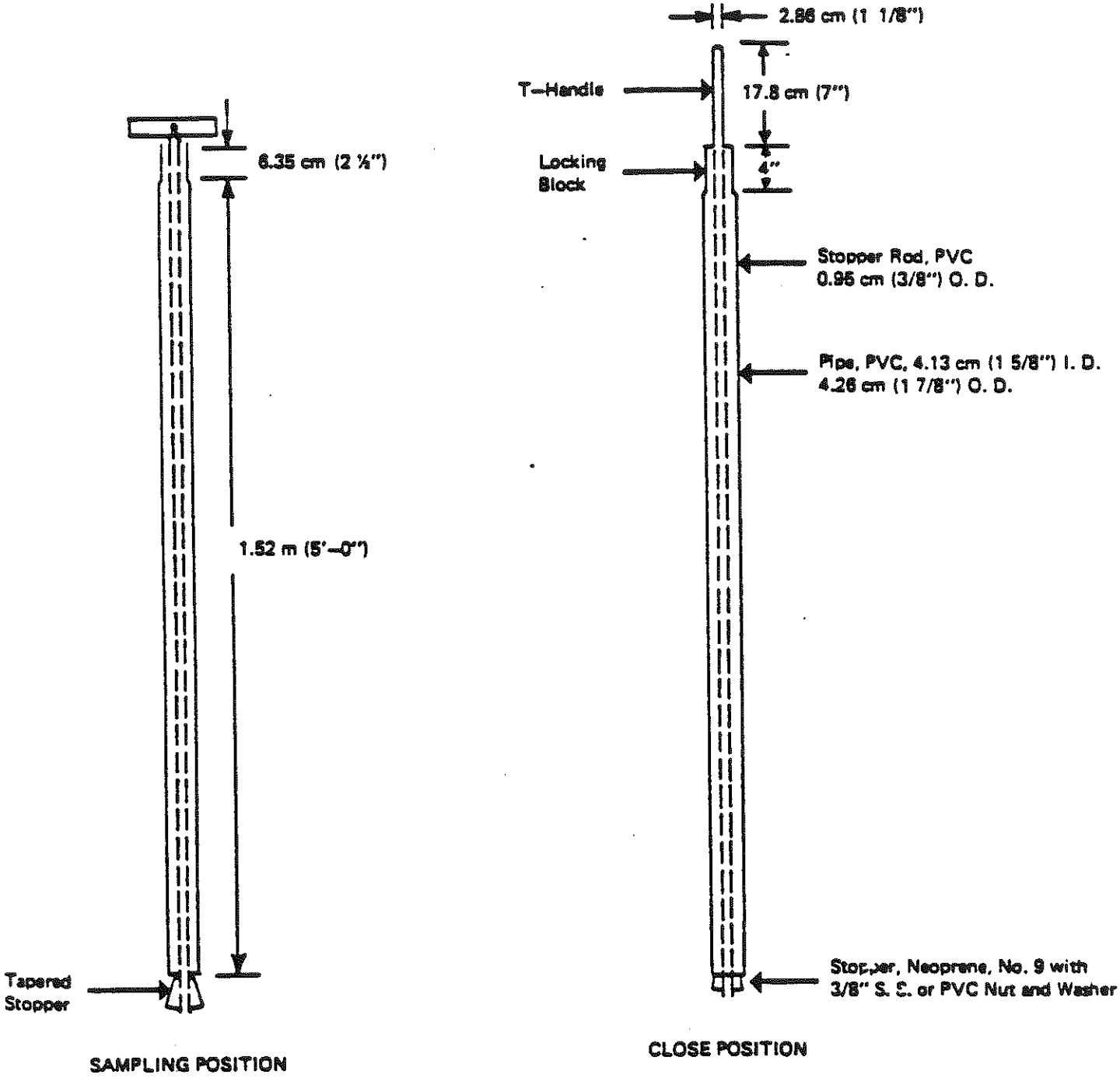


Figure 1. Composite liquid waste sampler (Coliwasa).

Procedure

1. Clean Coliwasa.

2. Adjust sampler's locking mechanism to ensure that the stopper provides a tight closure. Open sampler by placing stopper rod handle in the T-position and pushing the rod down until the handle sits against the sampler's locking block.

3. Slowly lower the sampler into the waste at a rate that permits the level of liquid inside and outside the sampler to remain the same. If the level of waste in the sampler tube is lower inside than outside, the sampling rate is too fast and will produce a nonrepresentative sample.

4. When the sampler hits the bottom of the waste container, push sampler tube down to close and lock the stopper by turning the T-handle until it is upright and one end rests on the locking block.

5. Withdraw Coliwasa from waste and wipe the outside with a disposable cloth or rag.

1.2.1.2 Weighted Bottle

Scope and Application

This sampler consists of a glass or plastic bottle, sinker, stopper, and a line which is used to lower, raise, and open the bottle. The weighted bottle samples liquids and free-flowing slurries.

General Comments and Precautions

1. Do not use a nonfluorocarbon plastic bottle to sample wastes containing organic materials.

2. Do not use a glass bottle to sample wastes that contain hydrofluoric acid.

3. Before sampling, ensure that the waste will not corrode the sinker, bottle holder, or line.

Apparatus

A weighted bottle with line is built to the specifications in ASTM Methods D 270 and E 300. Figure 2 shows the configuration of a weighted bottle sampler.

10 / SAMPLING - Implementation

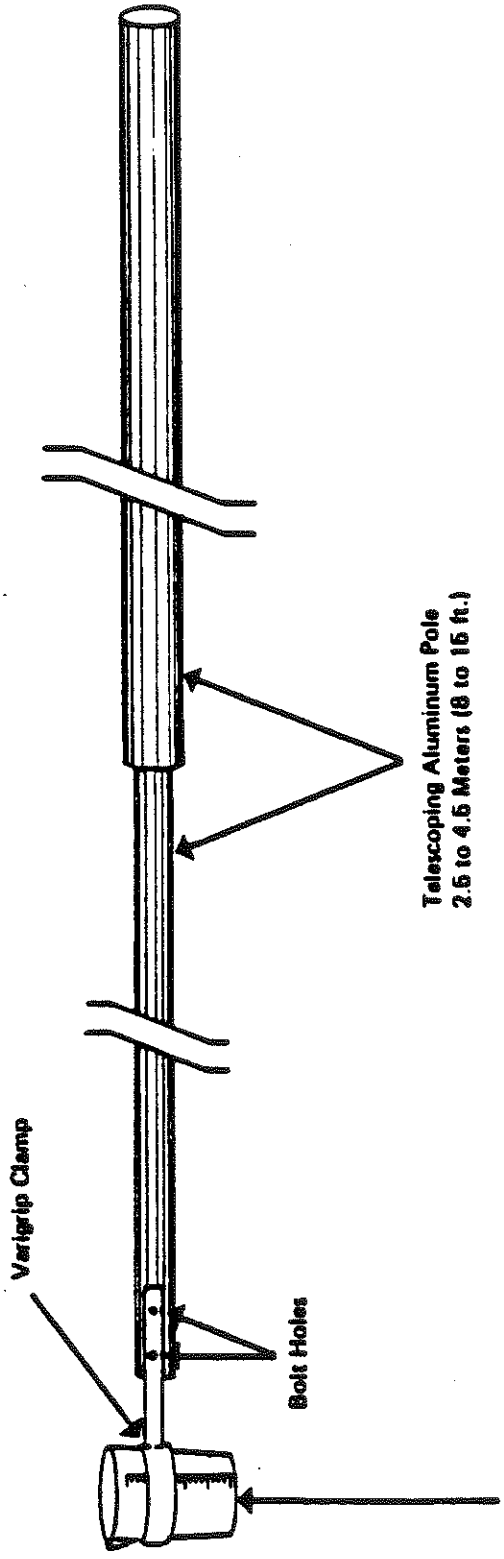


Figure 3. Dipper.

Procedure

1. Clean bottle.
2. Assemble weighted bottle sampler.
3. Lower the sampler to directed depth and pull out the bottle stopper by jerking the line.
4. Allow bottle to fill completely as evidenced by cessation of air bubbles.
5. Raise sampler, cap, and wipe off with a disposable cloth. The bottle can serve as a sample container.

1.2.1.3 Dipper

Scope and Application

The dipper consists of a glass or plastic beaker clamped to the end of a 2- or 3-piece telescoping aluminum or fiberglass pole which serves as the handle. A dipper samples liquids and free-flowing slurries.

General Comments and Precautions

1. Do not use a nonfluorocarbon plastic beaker to sample wastes containing organic materials.
2. Do not use a glass beaker to sample wastes of high pH or wastes that contain hydrofluoric acid.
3. Paint aluminum pole and clamp with a 2-part epoxy or other chemical-resistant paint when sampling either alkaline or acidic wastes.

Apparatus

Dippers are not available commercially and must be fabricated to conform to the specifications detailed in Figure 3. Table 3 lists the parts required to fabricate a dipper.

Procedure

1. Clean beaker, clamp, and handle.
2. Assemble dipper by bolting adjustable clamp to the pole. Place beaker in clamp and fasten shut.
3. Turn dipper so the mouth of the beaker faces down and insert into waste material. Turn beaker right side up when dipper is at desired depth. Allow beaker to fill completely as shown by the cessation of air bubbles.
4. Raise dipper and transfer sample to container.

WASTE ANALYSIS PLAN

All waste shipped off site is determined by an inspection (consisting of a chemist and the hazardous waste coordinator) to be either possibly hazardous or definitely non-hazardous. The locations of the various waste streams were determined by interviews with all plant superintendents and determining all of the actual and possible waste dispositions from their respective areas of the plant.

1. **The non-hazardous wastes are those known to either not be composed of toxic chemicals or not to have been in contact with any toxic material.**

   eg. Wood Scrap
   Cardboard Scrap
   Etc.

2. **All other items are considered to be possibly hazardous.**

A typical representative sample is obtained from the area in which the waste is generated according to instructions from Stilson Labs and as described in "Waste Analysis Section" - Pg. 37 and 38. This sample is sent to Stilson Laboratories, Columbus, for evaluation. Stilson Labs evaluates the sample for the four criteria required by RCRA - EP Toxicity, Corrosivity, Ignitability and Reactivity according to the "Test Methods for the Evaluation of Solid Waste, Physical Chemical Methods," SW-846 - (see letter Pg. 38b). Disposition of the waste is then handled according to the determinates of either being hazardous, non-hazardous, liquid or solid.

Possible new waste streams due to new and/or additional product developments are determined by the particular engineer involved with the project. Preliminary samples of the new waste stream are analyzed and after the decision is made as to the method of disposal, the final disposition is implemented by the hazardous waste coordinator.

If waste streams change, an analysis is made by Stilson Laboratories in order to determine the proper disposal method, eg. incineration, landfill.

TABLE I

HAZARDOUS WASTE PARAMETERS AND RATIONALE

Waste	Parameters	Rationale
Still Bottoms (Solid & Liquid)	Ignitability E.P. Toxicity - Pb & Cd	This is a listed waste (F005), exhibiting ignitability and toxicity Pb and Cd.
Dust Stop Waste	EP Toxicity - Cadmium	Past alalyses have identified only cadmium as exceeding EP toxic limits (D006).
Electroplating Sludge	EP Toxicity - Chromium	This is a listed waste - F006, chromium contaminated. No cyanides or reactive wastes are involved.
*Waste methylene chloride, 1, 1, 1 - trichloroethane	When generated: Methylene chloride 1, 1, 1 trichloroethane	This is a listed waste (F002).
*Waste cyclohexanone	When generated: cyclohexanone	This is a listed waste (F003).

*Although these wastes have not been generated, the potential for future generation exists. If and when they are generated, the wastes will be tested for the parameters as listed.

(4) Security Requirements

(i) In addition to the 24 hour trained guard service explained below, there are the general security provisions of fencing, gates and other features.

The lighting of the facility and the perimeter fencing is very good. The lighting is of sufficient quality to enable the TV monitoring cameras discussed below to be used on a 24 hour basis.

(ii) The guard force is equipped with hand held two-way radios in order to provide instant reporting of problem conditions.

(iii) A public address system is supplied for the entire facility and is audible inside and outside the plant buildings. A connection to the public address system is installed at the main guard house. All of the telephones throughout the facility are also connected to the PA system by dialing a single digit code number.

(iv) An internal telephone system is maintained throughout the facility. A phone is located immediately adjacent to the hazardous waste storage building.

(v) Employees enter and exit the facility only at gate with a member of the guard force in attendance. Visitors

and contractors entering the plant must sign in and out on a log sheet and also obtain a visitor's pass. See Figure 7.

(vi) Security at the Columbus Coated Fabrics Facility is maintained by a staff of trained outside security guards. A guard is stationed at all the active entrances and exits to the facility on a 24 hour basis. In addition, watchmen's key stations are maintained throughout the facility and these are operated by roving guards between the hours of 6:00 P.M. and 6:00 A.M.

In particular, a watchman's key station is immediately adjacent to the hazardous waste storage building.

(vii) At the main guard house, remote controlled TV cameras (total of 5) monitor the entire facility perimeter. A guard monitors these cameras on a 24 hour basis.

(viii) The gates not active for the entire 24 hours are closed, locked and monitored by the TV camera. These gates can be remotely operated by the guards at the main guard house if required.

(ix) The perimeter of the entire facility is enclosed within a 7 ft high chain link fence with 3 strands of barbed wire on top.

(x) Entry is controlled, as previously mentioned, by means of guards at all the gates when they are active - in order to pass either vehicles or personnel.

(xi) Signs at all entrances to the facility state "NO SMOKING". In addition, signs at the entrance to the hazardous waste storage building state "Danger - Unauthorized Personnel Keep Out".

FIGURE 7

COLUMBUS COATED FABRICS CO.

VISITORS' REGISTER

DATE:

VISITOR'S NAME:	FIRM NAME:	ADDRESS:	TIME IN:	TIME OUT:	License Plate NUMBER:	REFERRED TO:

DATE: September 30, 1982
REVISION NO: 0

FORM F-434-9 REV.

(5) Inspection Schedules

(i) The foreman in charge of the still recycling walks the area surrounding the still and also checks inside the hazardous waste storage building and the surrounding area. The foreman in charge of the loading dock area checks that specific area. These inspections are conducted as per the inspection schedule in Table II, Pg. 47, with the frequency as indicated. This inspection schedule will be kept at the facility.

Figure 8, Pg. 47a, is a daily inspection log providing a record of the inspector's specific observations as per the inspection schedule, Table II (pg. 47) and the remedial action taken, if required, including the date of such action.

Figure 8a, Pg. 47b, is a hazardous waste drum inventory sheet on which the inspector indicates the actual daily inventory of the number and type of hazardous waste drums in storage. This sheet also lists the date drums were shipped to the disposer and indicates in the remarks column the name of the disposer to which the drums were shipped.

(a) General Inspection Requirements

The Columbus Coated Fabrics Company inspects the hazardous waste storage area in order to discover any equipment malfunction, operator errors, or discharges that would cause or lead to the release of hazardous waste.

(b) The inspections are conducted for the specific purpose of:

(1) Determining if there are any leaks in the hazardous waste storage drums. If a problem is found, the foreman immediately notifies the proper persons to either fix the leak in the drum or transfer the material to a second drum.

(2) Checking the availability and soundness of safety and emergency equipment.

(3) Checking on operating equipment.

(4) Checking on security equipment.

(ii) Remedial Action

If inspections reveal that non-emergency maintenance is needed, they will be completed as soon as possible to preclude further damage and reduce the need for emergency repairs. If a hazard is imminent or has already occured during the course of an inspection or anytime between inspections, remedial action will be taken immediately. Columbus Coated Fabrics personnel will notify the appropriate authorities per the Contingency Plan and initiate remedial actions. In the event of an emergency involving the release of hazardous constituents to the environment, efforts will be directed towards containing the hazard, removing it, and subsequently decontaminating the affected area. Refer to the Contingency Plan for further details.

HAZARDOUS WASTE STORAGE
IN 55 GALLON DRUMS - SOI

DATE: May 6, 1983
REVISION NO: 1

FIGURE 8a

MONTH OF Aug 1982

DATE	SHIPPED TO DISPOSER	WASTE SOLID & LIQUID PLACED IN STORAGE		TOTAL WASTE SOLID/LIQ. IN STORAGE - BY TYPE		NET TOTAL IN STORAGE	REMARKS	Leaks Insp
		*F005	+D006 & D007	*F005	+D006 & D007			
1							Saturday	
2		80	-	60		1?0		[illegible]
3		84		76		160		[illegible]
4		84		84		168		[illegible]
5	76 S	84		28		112	To Cecos	[illegible]
6	76 L						To Ross	
7							Saturday	
8							Sunday	
9		4		40		[illegible]		[illegible]
10				?2				
11		8		60		47		[illegible]
12		8		72		80		[illegible]
13		8		80		88		[illegible]
14		—		—			Saturday	
15		—		—			Sunday	
16	74	8		8		16	To Cecos	[illegible]
17		12		12		2?		[illegible]
18		12		24		36		[illegible]
19		12		25		40		[illegible]
20		12		40		52		[illegible]
21			SAT					
22			SUN					
23		12		44		56		[illegible]
24		12		52		64		
25		16		60		[illegible]		
26		16		66		8?		
27		16		88		104		[illegible]
28			SAT					
29			SUN					
30	72	20		100 / 28		120 / 48	To Cecos	[illegible]
31		20		28		48		[illegible]

*F005 is waste from scrap ink-solvent recovery still.
+D006 and D007 is waste from calender area - dust stop oil residue.

FIGURE 8

DATE: May 6, 1983
REVISION NO: 1

INSPECTION LOG

MONTH_____ YEAR_____

DATE	TIME	INSPECTORS NAME	OBSERVATIONS MADE	REPAIRS COMPLETED-REMARKS
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
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20				
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22				
23				
24				
25				
26				
27				
28				
29				
30				
31				

INSPECTION S)ULE - CCF

Area/Equipment	Specific Item	Types of Problems	Frequency of Inspection
Safety & emergency equipment	Sand	Out of stock	Weekly/as needed
	Portable sump pump	Availability; functional	Weekly
	Telephone	Functional	Daily
	Fire Hose	Leaks; water pressure	Daily
	Sprinkler system	Leaks; water pressure	Daily
	Emergency shower	Leaks; functional; water pressure	Weekly
	First aid equipment and supplies	Items out of stock	Weekly
Security devices	Facility fence	Damage to chain link structure	Weekly
	Container storage bldg. door	Damage to structure	Daily
Operating and structural equipment	Solvent still and related equipment	Sump freeboard; leaks in system	Daily
Container storage area	Container placement and stacking	Unobstructed aisle space; height of stacks; segregation of waste types	Daily
	Sealing of containers	Drums without lids; loose lids	Daily
	Labeling of containers	Improper identification	Daily
	Containers	Corrosion; leakage; structural defects	Daily
	Pallets	Damaged	Daily
	Base or foundation, ramp	Severe cracks or deterioration; settling	Daily
	Sump area	Debris; deterioration	Daily
	Warning signs	Damaged; obstructed	Daily
	Waste storage bldg.	Roof, window integrity	Daily
	General waste storage area	Debris; unlabeled drums; drums out of place; obstructions to normal drum handling	Daily
	Brass or bronze tools	Availability; functional	Daily
Loading/unloading dock	Spill control sand	Out of stock	Weekly
	Obstructions to drum handling	Debris; standing obstructions, snow, ice, wet or oily surfaces	Daily
	Barrel truck	Functional	Weekly

DATE: May 6, 1983
REVISION NO: 0

(6) Prepardness and Prevention Waiver Request

Not applicable.

(7) Contingency Plan (Spill Prevention Control and Counter Measures Plan)

Columbus Coated Fabrics
Division of Borden Chemical
Borden Inc.

Facility is located at:

1280 North Grant Avenue
Columbus, Ohio 43201

The operations performed at this facility are:

1. **Production of vinyl sheeting.**
2. **Coating of vinyl fabric and paper substrates.**
3. **Printing on vinyl and paper.**
4. **Electroplating operations.**

The site plan showing the topography of the area, the adjacent land uses, and the adjacent land features is shown on Pg. #49a, Revision 0.

The structural features of the storage building are shown on a plan view - Pg. #49b, Revision 0 and a section view - Pg. #49c, Revision 0.

CONTINGENCY PLAN/SPCC

TABLE OF CONTENTS

DATE: November 21, 1983
REVISION NO: 1

CONTINGENCY PLAN/SPCC

TABLE OF CONTENTS

SPCC (SPILL PREVENTION CONTROL & COUNTER MEASURES) PLAN - COLUMBUS PLANT

SECTION I - History of Pollution Incidents Occurring.

A. There have been no "Spills" resulting in pollution of public waters at Columbus Plant since January 1973.

SECTION II - Pollution Potential at Plant Site.

Area and building numbers noted in Section V - Building Plans

A. Total quantities of oil and other substances stored at facility.

INSIDE STORAGE

Area 4 - Bldg. 106 -- 5500 gallons "max." of latex in 55 gallon drums.

-- 1650 gallons of wetting agent in 55 gallon drums.

--- 550 gallons of defoamers in 55 gallon drums.

-- 9000 pounds of dry pigments in drums.

Area 5 - Bldgs. 95 & 23 -- *27,000 gallons of print ink in 55 gallon drums.

-- 300 gallons of Y-1 (reclaimed MEK) in wash tanks.

Area 6 - Bldg. 6 & Bldg. 15 -- 1000 gallons on NH_4OH (28%) (ammonia) in tank.

-- 12,500 gallons of inprocess water based latex coating materials - stored in 5 - 2500 gallon tanks.

-- 7500 gallons of inprocess Plastisol coating material stored in 3 - 2500 gallon tanks.

-- 10,800 gallons in inprocess FN Grinds (pigment and plasticizer) in 6 storage tanks.

-- 4800 cubic feet of clay, pigments and PVC Resin in bags.

-- 1600 gallons of various latex and PVC coating materials in 20 mixers.

Area 7 - Bldg. 93 -- 50,000 gallons of raw latex stored in 5 - 10,000 gallon tanks.

-- 10,000 gallons of inprocess water based latex coating material in a storage tank.

*NOTE: Revised February 24, 1982

Area 8 - Bldg. 33 - 2nd Floor -- 400,000 pounds PVC Resins in 50 Lb. bags.

Area 9 - Bldg. 38 - 2nd Floor -- 24,000 pounds PVC Resins in 50 Lb. bags.

-- 10 - 250 pound drums aluminum powder.

Area 10 - Bldg. 35 -- 7,300 gallons of clear vinyl coating material in 50 gallon drums.

-- 3,000 gallons of PVC based adhesive in 3 storage tanks.

-- 1,100 gallons of various PVC coating materials in 11 mixers.

Area 11 - Bldg. 35 -- 3,800 gallons of vinyl coating materials stored in 55 gallon drums.

-- 1,400 gallons of Plastisol coating material in mixers.

*Area 12 - Bldg. 37 -- 200,000 pounds PVC Resin stored in 50 pound bags.

Area 13 & 18 - Bldg. 38 - Lower Level -- 10-250-pound drums aluminum powder.

-- 4,000 pounds PVC Resin in 50 pound bags.

-- 162 drums of assorted raw materials, stabilizers, plasticizers, silicone rubber, acrylic resin and flexigard coatings.

Area 14 - Bldg. 33 - First Floor -- 4,000 gallons clear vinyl resin coating material stored in 55 gallon drums.

Area 15 - Bldg. 33 - First Floor -- 2,700 gallons water latex coating material stored in 55 gallon drums.

-- 2,700 gallons of plastisol coating materials stored in 55 gallon drums.

Area 16 - Bldg. 93 - First Floor -- 4,500 gallons water latex and plastisol coating materials stored in movable containers.

Area 19 - Bldg. 58 -- 4,300 gallons of various plastisol coating and clear vinyl resin coating stored in 55 gallon drums.

1,600 gallons of various plastisol coating in mixers.

Area 20 - Bldg. 85 -- Approximately 800,000 pounds of dry raw materials (pigments, clay, calcium carbonate, PVC resins) stored in fibre drums and bags.

* Note: Revised September 30, 1982

Area 21 - Bldg. 85 - 2nd Floor -- 3,600 pounds various plasticizers temporarily stored in inprocess weigh tanks.

-- 550 gallons of various liquid stabilizers stored in 55 gallon drums.

Area 22 - Bldg. 67 - 2nd Floor -- 1,800 pounds various plasticizers temporarily stored in inprocess weigh tanks.

Area 23 - Bldg. 67 - 2nd Floor -- 1,600 gallons liquid stabilizers and plasticizers stored in 55 gallon drums.

Area 24 - Bldg. 85 - 2nd Floor -- 1,800 pounds of various plasticizers temporarily stored in holding and mixing tank.

Area 25 - Bldg. 104 - 2nd Floor - 1,800 pounds of various plasticizers temporarily stored in holding and mixing tank.

-- 3,000 pounds of various pigments in fibre drums and bags.

Area 26 - Bldg. 109 - 2nd Floor - 1,800 pounds of various plasticizers temporarily stored in holding and mixing tank.

Area 27 - Bldg. 109 - 2nd Floor - 50,000 pounds of clay and calcium carbonate stored in bags.

Area 28 - Bldg. 109 - 2nd Floor - 10,000 pounds of various pigments in fibre drums and bags.

Area 30 - Bldg. 101 -- The following is list of miscellaneous items stored and used in Plating operation.

1. 80 Gallons Aerodet heavy duty cleaner.
2. 95 Gallons muriatic acid.
3. 26 Gallons Sulfuric acid.
4. 500 Pounds Chromic acid.
5. 400 Pounds Copper Sulfate.
6. 35 Pounds Copper Cyanide.
7. 50 Pounds Potassium Cyanide.
8. 150 Pounds Sodium Hydroxide.
9. 100 Gallons Anode cleaner (contains 100 Pounds Sodium Hydroxide/50 Pounds Rochelle Salt.)
10. 65 Gallons Methylene Chloride.

Area 30
(Cont.) -- 11. 55 Gallons Naptha

12. 30 Gallons rust & corrosion preventive.

13. 20 Gallons degreaser.

14. 55 Gallons cold stripper

15. 145 Gallons Globrite 200 (contains muriatic acid).

16. 40 Gallons paint stripper.

17. 135 Gallons oil.

The following is list of plating baths and quantities.

1. 450 gallon - copper plating bath - mixture of water, copper sulfate and sulfuric acid. (CP-19)

2. 370 gallon - copper plating bath - mixture of water, copper sulfate and sulfuric acid. (CP-20)

3. 378 gallon - chrome plating bath - mixture of water, chromic acid and sulfuric acid. (CP-2)

4. 388 gallon - chrome plating bath - mixture of water, chromic acid and sulfuric acid. (CP-23)

5. 245 gallon - cyanide treating bath - mixture of water, copper cyanide, potassium cyanide and sodium hydroxide. (CP-21)

*Area 31 - Bldg. #37 & 59 - Solvent Still Area & Hazardous Waste Storage

1. Approx. 130 drums ink on hand awaiting recovery.

2. Approx. 30 drums partially filled - scrap resins and plasticizers awaiting filling with still bottom sludge for landfill disposal.

3. Maximum of 450 drums in storage awaiting shipment to disposer in addition to drummed and bagged raw material storage.

*NOTE: Revised September 30, 1982

OUTSIDE STORAGE

Tank #11 -- 10,000 gallons mineral spirits - UNDERGROUND

Tank #16 -- 6,100 gallons diesel fuel - ABOVE GROUND

Tank #17 -- 6,100 gallons diesel fuel - ABOVE GROUND

Unidentified -- 450 gallons kerosene fuel - UNDERGROUND

Tank #31 -- 10,000 gallons R595 (acetone) - UNDERGROUND

Tank #32 -- 10,000 gallons R551 (MIBK) - UNDERGROUND

Tank #33 -- 10,000 gallons R545 (MEK) - UNDERGROUND

Tank #34 -- 10,000 gallons R545 (MEK) - UNDERGROUND

Tank #35 -- 10,000 gallons Y-1 (scrap solvent) - UNDERGROUND

Tank #36 -- 10,000 gallons Y-1 (scrap solvent) - UNDERGROUND

Tank #37 -- 12,000 gallon -- OUT OF SERVICE - UNDERGROUND

Tank #38 -- 2,000 gallons Y-1 (scrap solvent) - UNDERGROUND

Tank #39 -- 2,000 gallons Y-1 (scrap solvent) - UNDERGROUND

Tank #40 -- 2,000 gallon - OUT OF SERVICE - UNDERGROUND

Tank #41 -- 2,000 gallons Y-1 (scrap solvent) - UNDERGROUND

Tank #42 -- 2,000 gallons Y-1 (scrap solvent) - UNDERGROUND

Tank #43 - 10,000 gallons R501 (Paraplex G-62) - ABOVE GROUND

Tank #44 -- 10,000 gallons R641 (DOP plasticizer) - ABOVE GROUND

Tank #45 -- 10,000 gallons R569 (ADMEX 746) - ABOVE GROUND

Tank #46 -- 10,000 gallons Y-1 (scrap solvent) - UNDERGROUND

Tank #47 -- 10,000 gallons R522 (tetrahydroforan) - UNDERGROUND

Tank #48 -- 10,000 gallons R545 (MEK) - UNDERGROUND

Tank #49 -- 12,000 gallons R545 (MEK) - UNDERGROUND

Tank #50 -- 10,000 gallon - OUT OF SERVICE - UNDERGROUND

Tank #51 -- 6,500 gallon R564 (mineral spirits) - UNDERGROUND

Tank #52 -- 6,500 gallons R507 (Toluol) - UNDERGROUND

Tank #53 -- 5,600 gallon - OUT OF SERVICE - UNDERGROUND

Tank #54 - 5,600 Gallon - OUT OF SERVICE - UNDERGROUND

Tank #55 -- 4,500 gallons R551 (MIBK) - UNDERGROUND

Tank #56 -- 4,500 gallons R554 (Xylol) - UNDERGROUND

Tank #57 -- 12,000 gallons R675 (Emery 9720 Plasticizer) - ABOVE GROUND

Tank #58 -- 12,000 gallons R582 (Santicizer 711) - ABOVE GROUND

Tank #59 -- 12,000 gallons R501 (Paraplex G-62) - ABOVE GROUND

Tank #60 -- 12,000 gallons R625 (Plastolein 9058 DOZ) - ABOVE GROUND

Tank #61 -- 12,000 gallons R657 (N-Octyl N-Decyl Adipate) - ABOVE GROUND

Tank #65 -- 10,000 gallons R680 (Admex 529) - ABOVE GROUND

Tank #66 -- 10,000 gallons R582 (Santicizer 711) - ABOVE GROUND

Tank #71 -- 5,000 gallons R670 (Di/So Decyl Phthalate) - ABOVE GROUND

Tank #72 -- 5,000 gallons R682 (DNOP) - ABOVE GROUND

Tank #73 -- 5,000 gallons R670 (Di/So Decyl Phthalate) - ABOVE GROUND

Tank #74 - 5,000 gallons R656 (Santicizer 160) - ABOVE GROUND

Tank #75 -- 10,000 gallons R582 (Santicizer 711) - ABOVE GROUND

Tank #76 -- 10,000 gallons R676 (Santicizer 141) - ABOVE GROUND

Tank #77 -- 2,000 gallons - NOT IN USE - ABOVE GROUND

Unidentified -- 600 gallons - gasoline - UNDERGROUND

Silo #1 -- 225,000 pounds R630 PVC Resin - ABOVE GROUND

Silo #2 -- 225,000 pounds R630 PVC Resin - ABOVE GROUND

Silo #3 -- 225,000 pounds R630 PVC Resin - ABOVE GROUND

Silo #4 -- 170,000 pounds R612 PVC Resin - ABOVE GROUND

Silo #5 -- 225,000 pounds R653 PVC Resin - ABOVE GROUND

Silo #6 -- 225,000 pounds R612 PVC Resin - ABOVE GROUND

Area 29 -- 16,500 gallons Liquid Stabilizers Stored in 55 gallon drums.

Unidentified -- 10,000 gallons - #2 Fuel Oil - UNDERGROUND *

*NOTE: Revised December 30, 1976.

B. Largest Potential Spill -- the greatest potential spill is from tanks numbered 43 to 45, 57 to 66 and 71 to 76. These liquids are all plasticizers which are not highly flammable but must be considered pollutants should the material get into the sewers. In the event of a spill, these tanks would drain and would be contained on the property due to land contour or drain to Parker Alley at a point which is approximately 350 feet from Fifth Avenue. The alley passes between buildings 85 and 86 and 104 for a length of 125 feet, which is a good location to build a temporary sand bag dike to block and contain a possible spill before it reaches Fifth Avenue.

A second greatest potential spill is from the tanks numbered 16 and 17 containing 6,100 gallons of diesel fuel each. These tanks are completely diked to contain the total contents of both tanks.

A third greatest potential spill is from the inside bulk raw latex storage and inprocess latex storage tanks. Spills from these tanks can be contained within the building. If spills are large enough to reach a floor drain, the floor drain can be blocked by using bags of clay or scrap cloth that is available.

C. POTENTIAL CAUSES OF SPILLS

1. Employee negligence - inaccurate inventory and filling tanks to overflowing condition, knocking over drums or puncturing drums, allowing liquids to discharge onto ground and eventually drain into combination storm and sanitary sewer.
2. High winds, tornadoes, explosions, earthquakes, or equipment failure, etc. could cause rupture of tanks or pipe lines allowing liquid to eventually drain into combination storm and sanitary sewer.
3. Acts of vandalism - tanks could be ruptured maliciously or liquids could be dumped onto the ground into sewer manholes or drains.

SECTION III - SPILL PREVENTION AND CONTAINMENT

A. Exterior Storage.

1. Tanks -- Diesel Fuel tanks are diked with sufficient area and height to contain entire volume of tanks.

   Plasticizer Tanks 43 to 45, 57 to 66 and 71 to 76 are not adjacent to storm drains but they are near to Parker Alley which has a gradual slope toward Fifth Avenue. A plan has been developed to build a temporary sand bag dike across Parker Alley in the event of a spill, in order to contain the spill.

2. Tank Cars -- Tank cars of plasticizer and solvent are occasionally unloaded along east side of the property where natural contour of land would contain spill.

3. Tank Trucks -- Tank trucks are unloaded at two stations. Each of these areas represents a potential spill area that could eventually drain into the combination storm and sanitary sewers.

A plan has been developed for the unloading site at the north end of the facility which consists of the use of a cover plate and sand bags over a sewer opening. In the event of a spill, it then can be contained by the land contour.

A separate plan has been developed for the unloading site at the south end of the facility which consists of installing a ramp at the exit of Parker Alley plus the use of sand bags to prevent a potential spill from reaching the sewer opening at Fifth Avenue.

B. Interior Storage.

The location of containers or mixers are mostly located in areas without floor drains. Spills from these containers would be small and could be contained inside the building.

*C. Plating Building (Area 30)

1. In the event of a rupture of one of the plating tanks (other than the cyanide tank):

   a. The drain into the sump is to be plugged and the liquid will drain into the underfloor trench. This will prevent eventual discharge into the sanitary sewer.

   b. Maintenance will be notified immediately in order to pump the liquid into drums for disposition as per RCRA regulations.

2. In the event of a rupture of the cyanide tank:

   a. The liquid will drain into the curbed area surrounding the tank (there is no drain within this curbed area).

   b. Maintenance will be called to pump the liquid contained in the curbed area into hazardous waste drums for disposition as per RCRA regulations.

D. Hazardous Waste Storage Building (Area 31)

1. Because fire is always a potential hazard in spills of flammable materials, possible sources of ignition have been eliminated. Vehicular traffic and hazardous work in the area will cease until the spill is contained and safety is restored.

   a. If spilled material is flammable, the fire brigade will maintain a watch while the spill is removed.

   b. The spill will be pumped with a portable pump from the sump in the storage building into type 17E Hazardous Waste Storage Drums (orange).

   c. The drums containing the spilled waste will be manifested out to the appropriate hazardous waste disposal facility.

(d) Any remaining areas on the floor of the building containing spilled liquid will be squeezed and soaked up with a floor dry type of absorbent and/or an absorbent type pillow.

2. Contaminated Water Generated as a Result of Fire Control

a. In the event of fire control where quantities of water generated in the storage area are sufficient to exceed the containment capacity - an emergency containment dike of sand and/or adsorbent pads would be placed across the concrete roadway leading away from the hazardous waste storage building.

b. Contained water will be analyzed to determine if contaminated.

c. If the contained water is contaminated, it will be drummed into type 17E hazardous waste storage drums (orange) by means of a portable pump and nanifested out to the appropriate hazardous waste disposal facility.

3. Determination and identification of hazardous materials involved in an emergency.

a. If the spill is the result of a drum leak, then the leaking drum can be visually identified from the hazardous waste label affixed in order to determine the type of hazardous material involved.

4. If operating personnel notice any emergency, such as a spill, they will notify their foreman at once and take immediate steps to contain the emergency. If the emergency is a fire, the fire alarm in the area

(on exterior wall of Bldg. #36 - within 60 ft. of Hazardous Waste building door) will be activated which alerts the CCF emergency brigade and the City of Columbus Fire Department.

a. If the emergency is such that it cannot immediately be contained by the operators and foreman, one of the emergency coordinators will be notified by the foreman.

b. Norm Orr, Emergency Coordinator, or, in his absence, any of the alternate emergency coordinators listed on pages 63 and 64 shall immediately react to the notification of an emergency by proceeding at once to the location of the emergency.

c. They will assume authority for obtaining and directing the necessary equipment and personnel respectively in order to contain and eliminate the cause of the emergency. If the emergency is a spill, maintenance personnel are notified and dispatched with a portable pump to the emergency area.

d. The Emergency Coordinator will have the following resources in order to determine if the emergency situation presents a serious threat to human health inside and outside the facility.

   (1) Visual Inspection

   (2) On-site Analytical Capabilities

e. In response to a fire, explosion or release, the hazardous waste and solvent still activity will be ceased. These areas will be monitored by the solvent still operator for the unlikely occurrence of leaks, pressure build-ups, gas generation and ruptures in pipes or valves, as applicable.

When the emergency is under control and emergency equipment is decontaminated, renovated and returned to its proper location, the solvent still can be reactivated.

5. In the event of an emergency at the Hazardous Waste Storage building and area (such as a fire or a spill), the necessity for evacuation of any of the plant employees will be made on site by the Columbus Coated Fabrics Emergency Co-ordinator in coordination with the City of Columbus fire personnel. There would be no need to evacuate any residents, as there are none residing in any proximity to the Hazardous Waste area.

6. If a spill emergency is encountered outside of the storage building, there are three locations with emergency sand available that can be used to contain the spill. If, in the unlikely event that the spill is not contained at any of these locations, the only place it could go is the city storm sewer system. This would require no need for evacuation.

a. In the case of entry into the storm sewer system, the City of Columbus would be notified and the outfall would be monitored if necessary.

7. Any spills contained inside the Hazardous Waste storage building (the 6" high ramp will contain any such spill) will be pumped from the existing sump into Hazardous Waste drums. Any residual liquid on the floor will be squeegeed into the sump and also pumped into Hazardous Waste drums.

a. Any liquid from exterior spills caught in the sand diked areas will be pumped into Hazardous Waste drums. Shovels will be used to drum any spilled solids.

b. The Hazardous Waste drums will be sent to the appropriate licensed Hazardous Waste landfill.

8. All equipment used during emergency cleanup will be steam cleaned, if required, rinsed and placed in their respective storage areas; this will be done prior to the resumption of operations. Any contaminated wash waters collected from the cleaning will be drummed to Hazardous Waste drums and disposed of at a licensed disposal facility.

a. Any equipment, such as gloves, cloths, contaminated sand, absorbent pads, etc., which may be contaminated beyond the potential for cleaning will be collected, drummed and disposed of to a licensed disposal facility.

9. Spill Related Equipment Available

a. A portable pump for removal of spills from the sump inside the Hazardous Waste storage building or from emergency diked areas, is stored in the yard adjacent to the Hazardous Waste storage building.

b. Emergency sand is contained in drums at the Hazardous Waste Storage building, unloading dock and the location where the roadway leaves the fenced area.

c. Shovels for distribution of the emergency sand are stored in the vicinity of the drums containing the sand.

d. Squeegees are available in the area for cleaning residual liquids from the affected area.

E. Facility Drainage

All drainage from this facility drains into either a sanitary sewer system or into a separate storm sewer system.

F. Plant Security

All access to the facility is protected by security fence. There is a security guard service in attendance at all times with regular guard tours controlled by ADT security watch, at night, holidays, and weekends. The area surrounding the plant is fairly well lighted.

G. Characteristics and Potential Hazards of Wastes.

1. The following four pages (62b, 62c, 62d and 62c) contain the laboratory analyized characteristics of the generated Hazardous Wastes.

2. Hazards associated with the Hazardous Wastes

   a. Heavy metals as per the following sheets (62b, 62c, 62d and 62e) and a minimum amount of solvent (3%) composed of mostly MEK (Methyl Ethyl Ketone) are contained in the stored Hazardous Wastes.

   b. Occasionally some raw materials, that could be declared a waste, contain flammable solvents.

   c. Other than the flammable wastes noted on the following four pages, there is:

      1) HCl gas would be a major combustion product from mostly the solvent still bottoms if burned.

      2) The Dust Stop Oil would generate, if burned, some heavy metals in the smoke.

3. There are no secondary hazards beyond those identified in 1. or 2. above.

4. Due to smoke generation and the possibility of heavy metals in the smoke, personnel involved with a fire would take precautionary measures such as wearing of smoke masks consistent with good fire fighting practice.

5. There are no incompatible materials as per letter pg. #62f.

DATE: November 21, 1983
REVISION NO: 0

STILSON LABORATORIES, INC.
170 NORTH HIGH STREET
COLUMBUS OHIO 43215
PHONE - 614-228-4385

BORDEN INC.-COLS. COATED FABRICS
1280 N. GRANT AVE.
COLUMBUS, OHIO
BILL ILG

LAB NO. 112
JOB 92-5033-24
DATE DEC. 10, 81

LOCATION COLLECTED BORDEN SOLVENT STILL BOTTOMS - SOLID FORM

PRESERVATIVES USED -

DATE COLLECTED - - - DEC. 2, 81

TIME COLLECTED - - - 0000

FIELD PH - - - - - -

DATE RECEIVED - - - DEC. 3, 81

TEST	VOL. (ML)	DILTN FACT.	RESULT	UNIT
IGNITABILITY			54 130	C/F
ARSENIC			<0.005	MG/L
BARIUM			1.5	MG/L
CADMIUM			<0.1	MG/L
CHROMIUM			0.7	MG/L
LEAD			7.9	MG/L
MERCURY			<0.0005	MG/L
SELENIUM			<0.005	MG/L
SILVER			<0.1	MG/L

PROJECT MANAGER

THOMAS A. FERRO

DATE: November 21, 1983
REVISION NO: 0

STILSON LABORATORIES, INC.
170 NORTH HIGH STREET
COLUMBUS OHIO 43215
PHONE - 614-228-4385

BORDEN INC.-COLS. COATED FABRICS
1280 N. GRANT AVE.
COLUMBUS, OHIO
BILL ILG

LAB NO. 132
JOB 92-5033-26
DATE FEB. 18, 82

LOCATION COLLECTED CCF20 LIQ. STILL BOT.

PRESERVATIVES USED -

DATE COLLECTED - - - FEB. 1, 82

TIME COLLECTED - - - 0000

FIELD PH - - - - - -

DATE RECEIVED - - - FEB. 2, 82

TEST	VOL. (ML)	DILTN FACT.	RESULT	UNIT
CORROSIVITY				PH-SU
IGNITABILITY			<22 72	C/F
ARSENIC			<0.005	MG/L
BARIUM			<1.0	MG/L
CADMIUM			2.4	MG/L
CHROMIUM			0.22	MG/L
LEAD		10	14.0	MG/L
MERCURY				MG/L
SELENIUM			<0.005	MG/L
SILVER			<0.1	MG/L

PROJECT MANAGER Thomas A. Flippo
THOMAS A. FLIPPO

DATE: November 21, 1983
REVISION NO: 0

Stilson Laboratories, Inc.
Columbus and Cleveland, Ohio

ADDRESS REPLY TO: 170 N. HIGH ST. COLUMBUS, OHIO 43215
PHONE: 614/228-4385

E.P. TOXICITY
40 CFR 261.24

Client: Borden, Inc.
Columbus Coated Fabrics
1280 Grant Avenue
Columbus, Ohio 43201
Attn: Bill Ilg

Lab Number 8450
Job Number 92-5033-19
Date Reported 12/3/80

Location Collected Borden-PC 3 DUST STOP OIL AND PLASTICIZER RESIDUE
Date Collected 11/19/80
Date Received 11/19/80

EPA Hazardous Waste No.	Contaminant	Result milligrams/liter	Maximum Concentration milligrams/liter
D004	Arsenic		5.0
D005	Barium	80.	100.0
D006	Cadmium	6.0	1.0
D007	Chromium	< .1	5.0
D008	Lead	2.2	5.0
D009	Mercury		0.2
D010	Selenium		1.0
D011	Silver		5.0
D012	Endrin		0.02
D013	Lindane		0.4
D014	Methoxychlor		10.0
D015	Toxaphene		0.5
D016	2,4-D		10.0
D017	2,4,5-TP Silvex		1.0

DATE: November 21, 1983
REVISION NO: 0

STILSON LABORATORIES, INC.
170 NORTH HIGH STREET
COLUMBUS OHIO 43215
PHONE - 614-228-4385

COLS. COATED FABRICS-BORDEN, INC
P.O. BOX 208
COLUMBUS, OHIO 43216
ACCOUNTS PAYABLE

LAB NO. 48
JOB 92-5033-24
DATE AUG. 31, 81

LOCATION COLLECTED LIMESTONE SUMP CCF-23

PRESERVATIVES USED -

DATE COLLECTED - - - JULY 27, 81

TIME COLLECTED - - - 0000

FIELD PH - - - - - -

DATE RECEIVED - - - AUG. 7, 81

TEST	VOL. (ML)	DILTN FACT.	RESULT	UNIT
ARSENIC			<0.005	MG/L
BARIUM			<1.0	MG/L
CADMIUM			<0.1	MG/L
CHROMIUM			11.6	MG/L
LEAD			<0.1	MG/L
MERCURY			<0.0005	MG/L
SELENIUM			<0.005	MG/L
SILVER			<0.1	MG/L

PROJECT MANAGER Thomas A. Flippo (GLM)

THOMAS A. FLIPPO

FORM 1022C

DATE: November 21, 1983
REVISION NO: 0

INTER-COMPANY AND OFFICE CORRESPONDENCE

TO: BILL ILG

FROM: RICHARD L. ABRAMS

LOCATED AT:

{ Dept. Branch Division Company

SUBJECT: HAZARDOUS WASTE WAREHOUSE

DATE: MAY 4, 1983

The raw materials and hazardous wastes stored in our hazardous waste building will not react chemically with one another. Some wastes are toxic in varying degrees, and some constitute a fire or fire-related explosion hazard, but none will react to form more toxic or more flammable products, or produce heat.

A system will be established, with the assistance of Manufacturing, to assure that no reactive combinations of materials will be stored in that building.

Richard L. Abrams

Richard L. Abrams, PhD
Director of Quality Assurance

RLA/js

cc: S. Lizer
C. J. Oshinski

SECTION IV - DEVELOPMENT OF A DISCHARGE CONTINGENCY PLAN TO BE FOLLOWED IN EVENT OF AN UNAVOIDABLE SPILL.

*A. Notification Procedure. (For additional information, see Pg. No. 64)

1. Columbus Coated Fabrics - Division of Borden Chemical
   a. N. L. Orr - Safety Director (Emergency Coordinator)
   b. S. E. Lizer - Plant Manager
   c. M. E. Hawse - Emergency Brigade Chief
   d. L. T. Poteet - Maintenance Superintendent
   e. S. W. Morris - Director of Project Engineering
   f. D. H. Bibb - Supervisor & Chief of the Emergency Squad

2. Borden Company
   a. Operation Alert - 614-457-5200

3. State Agencies
   a. Ohio EPA Emergency Response Number
      2244-46 South Hamilton Road
      Columbus, Ohio 43227
      466-6542
      Ask for Hazardous Waste Section, Debbie Unger
   b. Ohio EPA Emergency Spill
      466-8508
   c. Ohio EPA Emergency Response
      361 East Broad Street
      Columbus, Ohio 43216
      466-6542

4. Governmental Agency
   a. National Response Center
      800-424-8802

5. City of Columbus Emergency Aid
   a. Columbus Fire Department
      221-2345

      The Columbus Fire Department inspects the facility once a year and checks out emergency equipment.

   b. Columbus Emergency Squad
      221-2345

      The emergency squad takes injured to a hospital determined after arrival at the plant.

   c. Columbus Police Department
      462-4545

*Revised February 24, 1982

SECTION IV - DEVELOPMENT OF A DISCHARGE CONTINGENCY PLAN TO BE FOLLOWED IN EVENT OF AN UNAVOIDABLE SPILL.

*A. Notification Procedure.

1. Columbus Coated Fabrics - Division of Borden Chemical

a. W. L. Orr - Safety Director (Emergency Coordinator)
953 Pleasant Ridge Avenue
Columbus, Ohio 43209
[redacted] non-responsive [redacted] Office Phone - 225-6200

b. S. E. Lizer - Plant Manager
1745 Bob-O-Link Bend East
Columbus, Ohio 43229
non-responsive [redacted] Office Phone - 225-6274

c. M. E. Hawse - Superintendent
433 West Kanawha Avenue
Columbus, Ohio 43214
non-responsive [redacted] Office Phone - 225-6280

d. L. T. Poteet - Maintenance Superintendent
6827 Retton Road
Reynoldsburg, Ohio 43068
non-responsive [redacted] [redacted] Phone - 225-6353

e. S. W. Morris - Director of Engineering
1069 Virginia Avenue
Columbus, Ohio 43212
non-responsive [redacted] Office Phone - 225-6320

f. D. H. Bibb - Supervisor & Chief of the Emergency Squad
3114 Reynoldsburg New Albany Road
New Albany, Ohio 43054
non-responsive [redacted] [redacted] Office Phone - 225-6223

*Added April 15, 1982

FORM 1022C

DATE: September 30, 1983
REVISION NO.: 2

INTER-COMPANY AND OFFICE CORRESPONDENCE

TO: WHOM IT MAY CONCERN

FROM: S. E. Lizer

LOCATED AT:

Dept. / Branch / Division / Company

SUBJECT:

DATE: 30 April 1983

Mr. Norman Orr, Safety Director of Columbus Coated Fabrics, located at Seventh and Grant Avenues, Columbus, Ohio, in his position as Emergency Coordinator, has the authority to use any needed resource to implement Emergency procedures for spill control, fire control, or any other incidents under the Contingency Plan.

In his absence, the alternate Emergency Coordinators listed have the same authority.

S. E. Lizer - Plant Manager
D. H. Bibb - Supervisor & Chief of the Emergency Squad
M. E. Hawse - Superintendent
L. T. Poteet - Superintendent of Maintenance
S. W. Morris - Director of Engineering.

S. E. Lizer
Plant Manager

Distribution:

D. H. Bibb
M. E. Hawse
W. G. Ilg (3)
S. W. Morris
T. J. Ness
N. L. Orr
L. T. Poteet

B. Containment of Spill.

1. Equipment on Hand -- loose sand and sand in bags. Oil absorbent material and portable pumps. Cover plate.

2. Temporary dikes can be built from sandbags, loose sand or oil absorbent material in the event of a spill. Maintenance men would pump contained spills into 55 gallon drums and use absorbent materials in final clean-up.

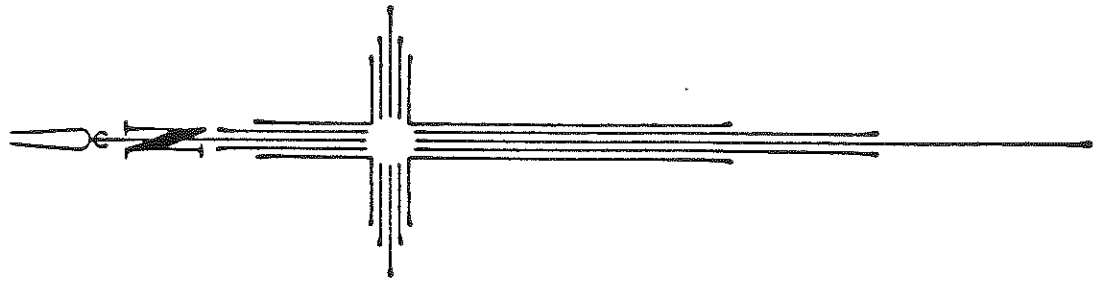
*SECTION V - BUILDING PLANS (Pg. 67 thru Pg. 67d)

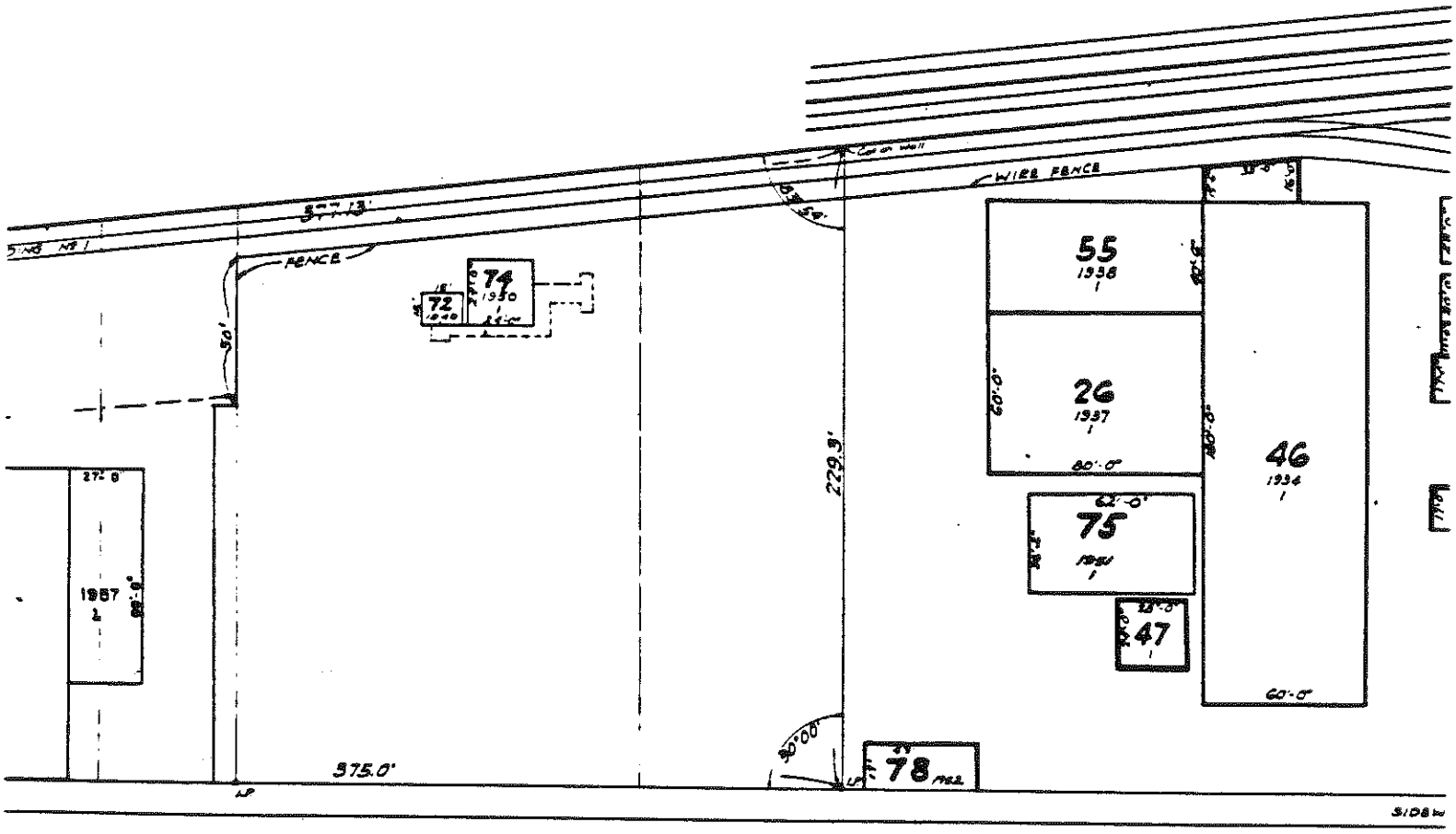
Prepared by S. W. Morris, Director of Project Engineering

*Added February 24, 1982

DATE: September 30, 1983
REVISION NO. 2

AREA NOTED IN ⬡





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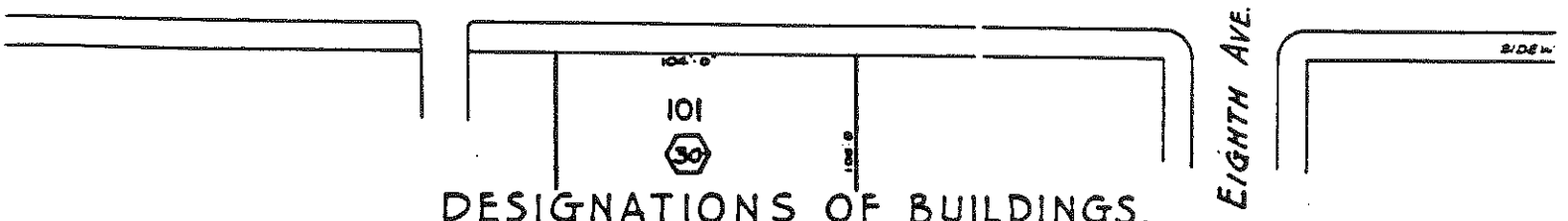


DESIGNATIONS OF BUILDINGS.

1 - ONE STORY
2 - TWO STORY
3 - THREE STORY
B - BASEMENT

27 RESTAURANT.
28 OIL KETTLE BUILDING.
29 TRANSFORMER ROOM.
30 PIPE SHOP.
31 PRINTING BUILDING.
32 FACTORY OFFICE BUILDING.
33 STORAGE PX BUILDING.
34 EMBOSSING PX BUILDING
35 MIXING PX BUILDING.

54 LABORATORY.
55 SAMPLE BUILDIN
56 SHIPPING & NOV
57 EMBOSSING ROC
58 MIXING ROOM
59 SOLVENT RECO
60 PIPE SHOP ADD
61 TOILET.
62 PAINT SHED.

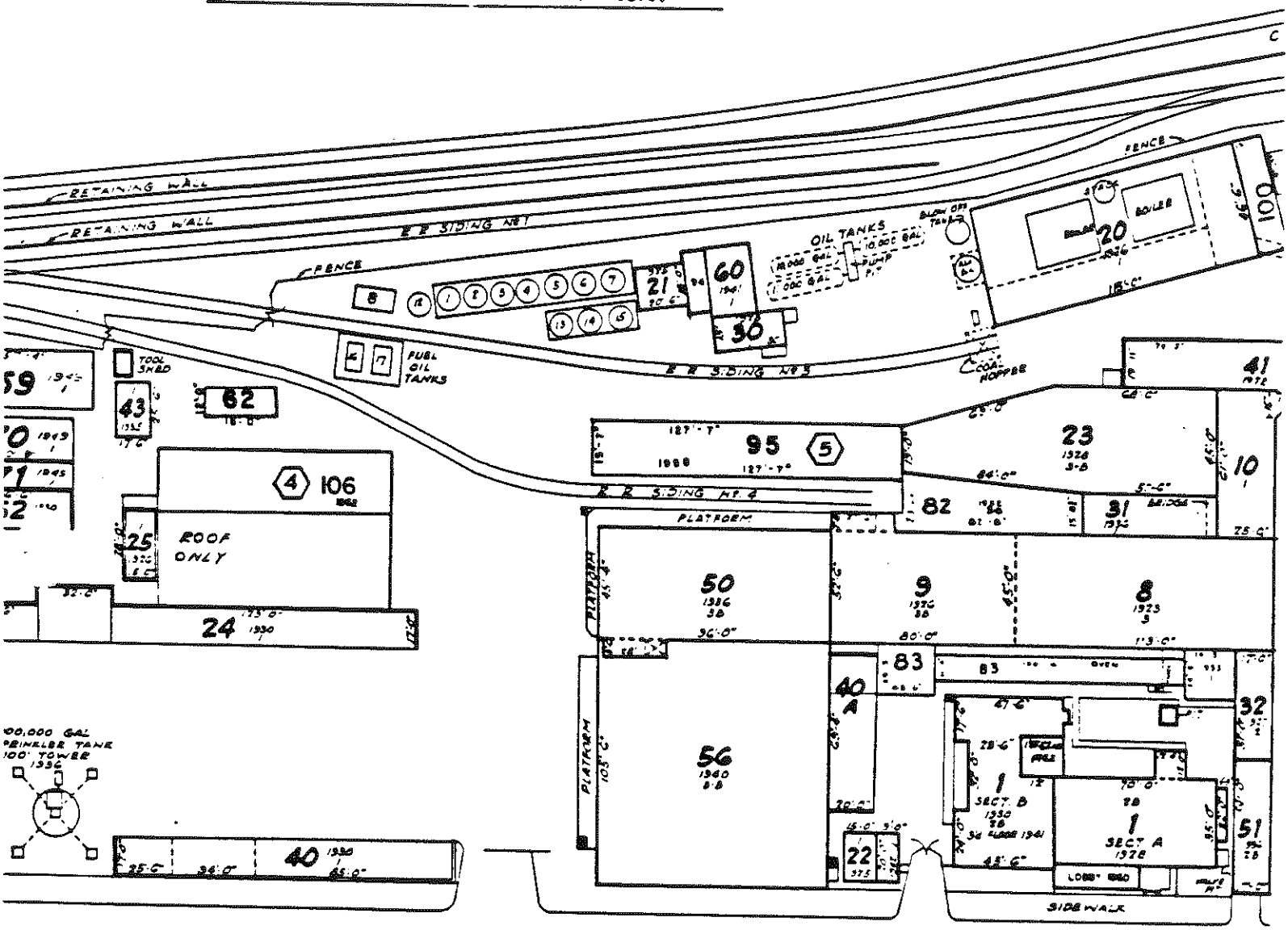
...T STORAGE SHELF
...RAGE & OFFICE BUILDING
..., THIRD COAT CALENDERS BUILDING
...E. RAW SHEETING CALENDER BUILDING.
...AKING BUILDING.

DATE: September 30, 1983
REVISION NO: 2

AREA NOTED IN ⬡

TOTAL ACREAGE = 16.25

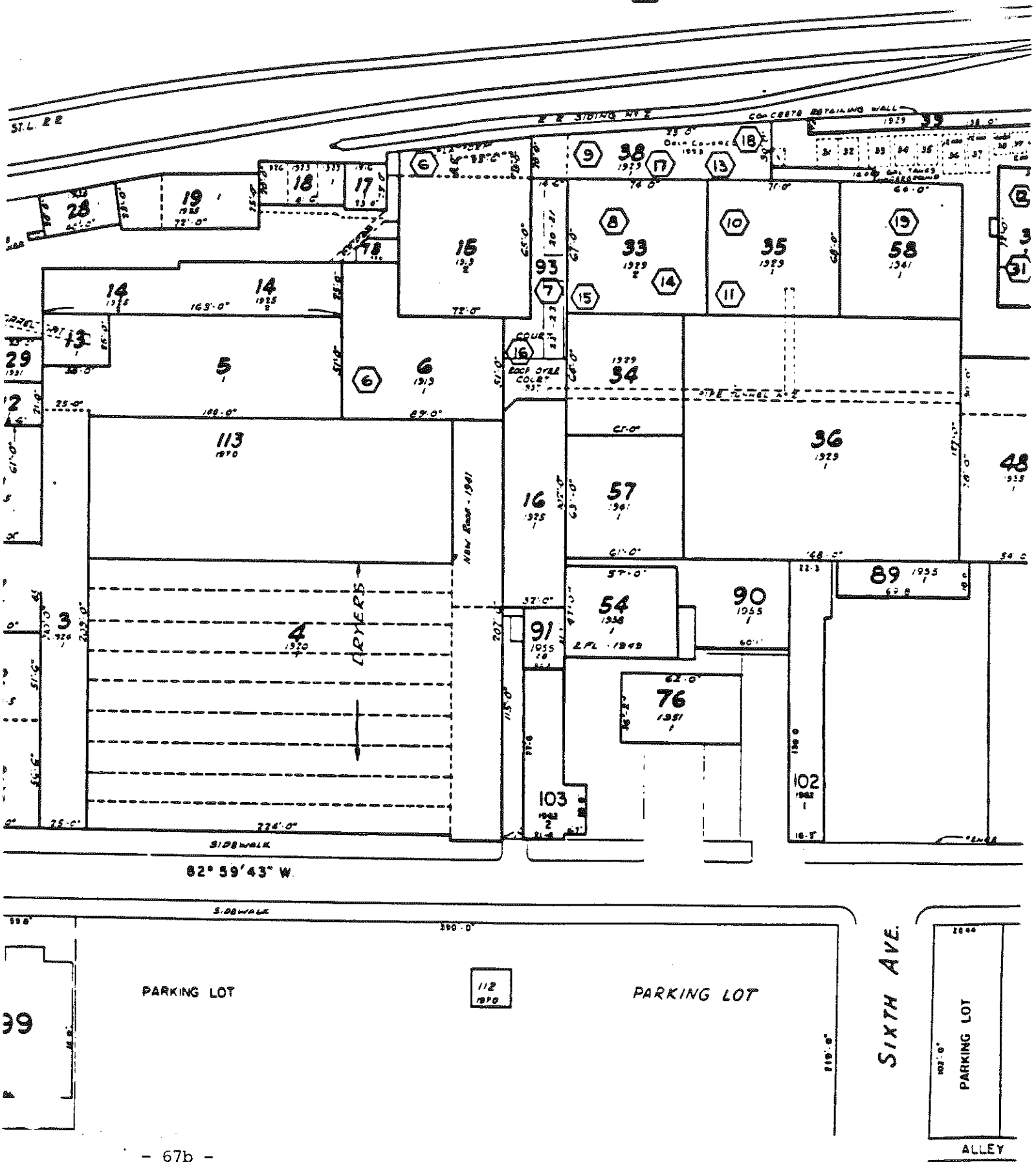
GROUND FLOOR SPACE =	344,798 FT² =	7.99	ACRES.
SECOND " " =	73809 FT² =	1.70	"
THIRD " " =	33222 FT² =	0.77	"
TOTAL " " =	448829 FT² =	10.37	"



82 PRINT, COLOR STORAGE
83 SURFACE PRINTER BLDG
84 ICE HOUSE STORAGE BLDG.
85 PLASTICS WAREHOUSE
86 PLASTICS CALENDER ROOM (GEN)
87 PLASTICS PRINT
88 PLASTICS COLOR STORAGE
89 STEEL BELT
90 PX RECEIVING DOCK

DATE: September 30, 1983
REVISION NO: 1

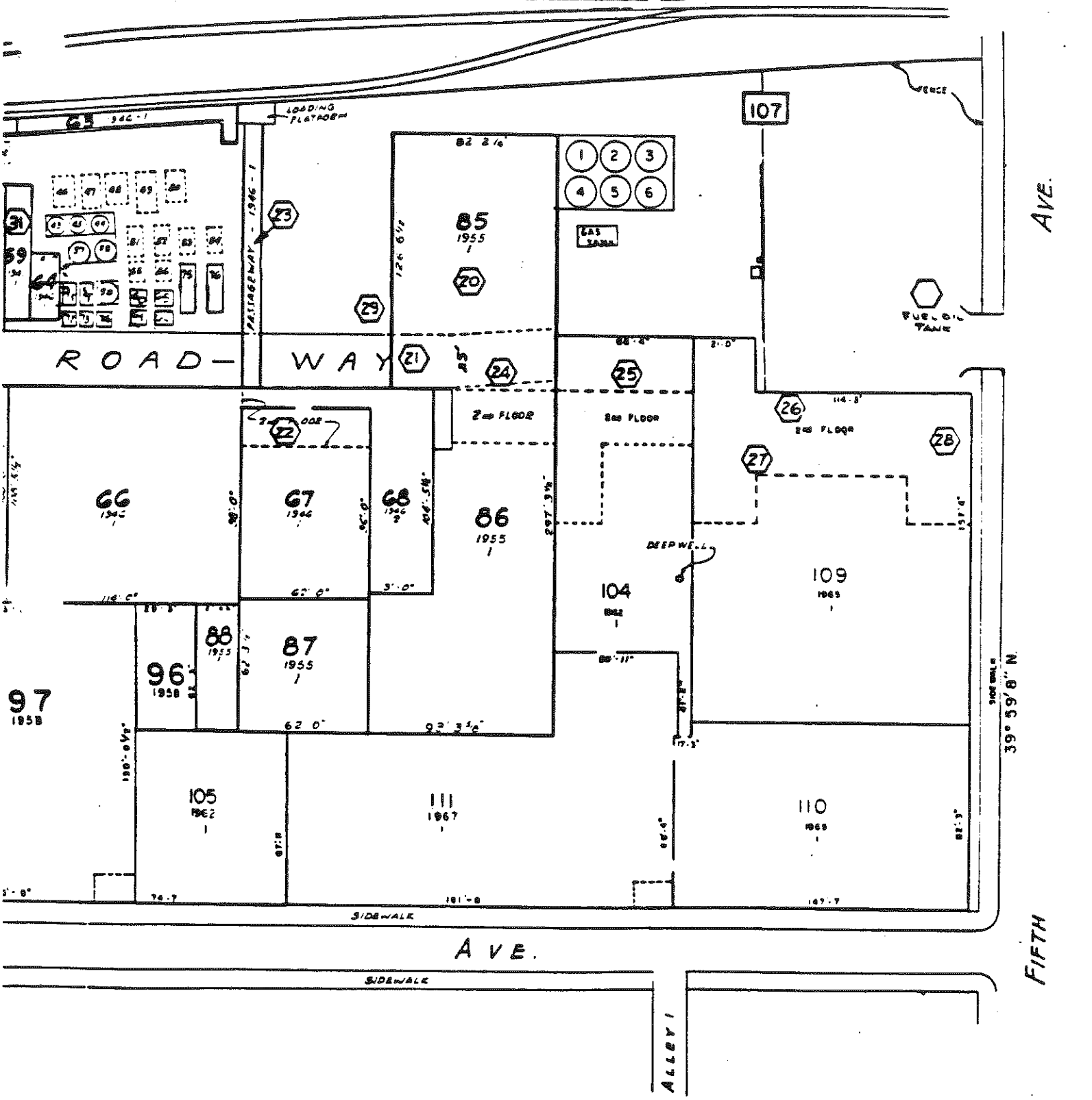
AREA NOTED IN



COLUMBUS COATED FABR

DATE: September 30, 1983
REVISION NO: 1

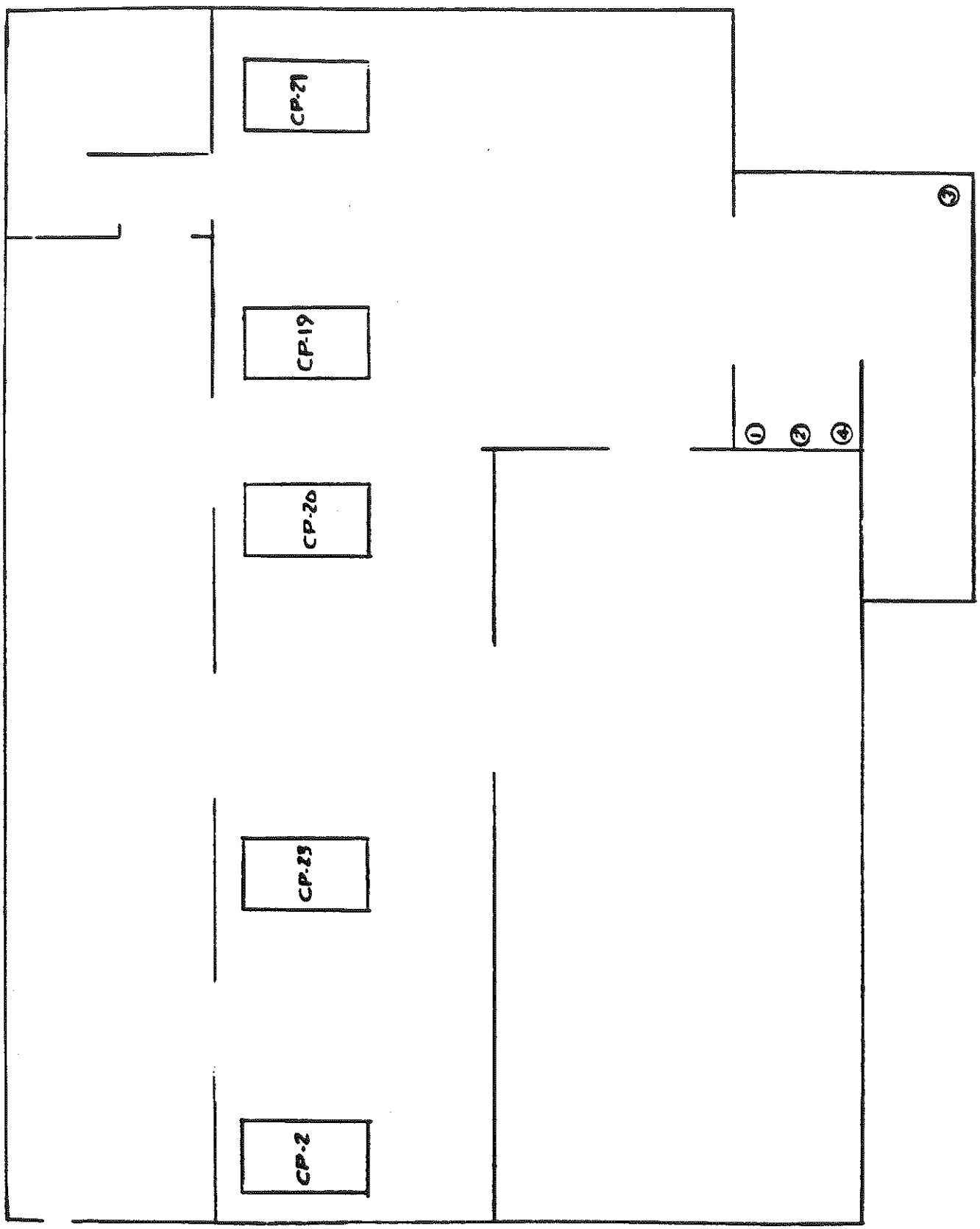
AREA NOTED IN



CS CORPORATION

DATE: September 30, 1983
REVISION NO: 1

CHROME PLATING 3-101 AREA 30



DATE: September 30, 1983
REVISION NO: 1

Safety Regulation
Date 4/20/84
Approved

VI. FIRE AND EXPLOSION EMERGENCY ACTION PLAN

Purpose

To ensure the safety of all employees in the event of a major fire and/or explosion, or other incident of major proportions.

Procedure

A. ON DUTY PERSONNEL ASSIGNMENTS:

In the event of a major fire and/or explosion, or other incident of major proportions in one of the manufacturing areas, the following basic assignments shall be carried out.

1. SHIFT SUPERINTENDENT

   a. The operating shift superintendent in the area of the disaster shall be in complete charge and direct the Emergency Brigade in fire fighting and emergency activities.

2. OPERATING FOREMEN

   a. Activate the area fire alarm, call Emergency Squad (dial 9-221-2345 in case of personal injuries call First Aid (dial 6040 or 6058).

   b. Report disaster emergencies other than fire and explosion on the company public address system, dial 7 and report the type of emergency and the location of emergency. Repeat the announcement at least 2 times.

   c. Notify the main gate guard (call 6213) of the location of the emergency and the arrival of the Emergency Squad.

   d. Shall direct the shut down of necessary equipment to minimize danger and loss.

   e. Evacuate all personnel, not needed in the emergency, via the designated evacuation route, to the designated assembly area and account for all personnel that report to him.

   f. Contact departmental superintendent or request guard to do so.

3. EMERGENCY BRIGADE

   a. Immediately following the fire alarm or reporting of an emergency, members of the Emergency Brigade will report to the emergency area to execute orders under the direction of the ranking Brigade member

   b. Members of the Emergency Brigade with special assignments shall proceed to their assigned posts and execute the special duties and

remain there until relieved by Brigade Chief unless otherwise instructed.

1. Sprinkler valves

2. Gate men

c. The Emergency Brigade will fight fires in the incipient stages only. Upon the arrival of the City Firemen and equipment, Emergency Brigade members shall be relieved of fire fighting duties.

d. The Emergency Brigade will assist in salvage and clean up duties and other assignments as directed by the operating foreman to minimize danger and loss.

e. A Brigade member shall be designated to meet emergency fire equipment at gate nearest to emergency area.

4. SHIFT MAINTENANCE FOREMAN

a. Immediately following the fire alarm or reporting of an emergency, shift maintenance supervisors shall report to the emergency area and direct the necessary maintenance activities.

1. In accordance with the pre-arranged plan:

Ensure an electrician is dispatched to man the fire pump.

Ensure a pipe fitter is dispatched to man the sprinkler valve controlling the fire area.

Shut off flammable gas and liquid systems in the emergency area.

5. SECURITY GUARDS

a. Guards will announce the arrival of City Fire Equipment and Emergency Squads and direct equipment to plant entrance nearest the emergency area.

b. Guards will permit only authorized personnel and emergency vehicles to enter the plant.

c. Guards, when authorized by supervision, will call persons as listed on the Emergency Call list.

d. Guards will remain at the phone in the Main Gate House to assure all areas receive the emergency call.

e. All media representatives shall be directed to the Personnel Manager.

B. ON ARRIVAL PERSONNEL OR DAY HOURS ASSIGNMENTS:

1. PLANT MANAGER/DEPARTMENTAL SUPERINTENDENTS

a. Assume direction of emergency activities.

2. SAFETY/SECURITY MANAGER

   a. Coordinate the loss control activities.

3. FIRST AID ATTENDANTS

   a. Direct all first aid activities.

   b. Keep records of casualties and disposition of injured employees.

4. PERSONNEL MANAGER

   a. Obtain authorization to coordinate arrangements for News Releases and Media inquiries.

   b. Ensure the notification of families of injured or hospitalized employees.

5. MAINTENANCE SUPERINTENDENT

   a. Ensure proper shut down of necessary equipment.

   b. Direct all emergency repair.

*C. AREA 31 (see Pg. 67b & 67c) - HAZARDOUS WASTE STORAGE - CONTROL PROCEDURES FOR FIRES

1. The entire Hazardous Waste Storage Building is separate from the main factory complex by a concrete roadway in the west side and a concreted area approximately 15 ft wide on the north side.
2. The Hazardous Waste Storage Building is protected from fire by a wet sprinkler system. The sprinkler system heads are located for a coverage in excess of "high hazard protection" (a maximum of 69 sq ft of floor space per sprinkler head).
3. In addition to the sprinkler system, a 1½ inch, 75 foot wall mounted fire hose reel is available connected to the internal fire system cf the facility. This is located directly across the roadway

west of the Hazardous Waste Storage Building. This hose will reach to the center of the Storage Building.

4. The storage building is easily accessible for fire fighting vehicles and equipment for both City fire fighting equipment and the plant fire brigade. See Map Pg. 66a for Access Route. The fire brigade will fight any fire until outside assistance has arrived.

5. The following action will be taken in the storage area in the event of a fire:
   (1) Fire doors in adjacent area will be closed.
   (2) Hazardous work in the area will be shut down immediately.
   (3) All equipment in the area will be shut down, as necessary and practical.
   (4) The Emergency Coordinator will be contacted (see Page 59).
   (5) The area will be cleared of all personnel not actively involved in fighting the fire.
   (6) All injured persons will be removed, and medical treatment will be administered by qualified personnel.

6. The Emergency Coordinator will have the following resources in order to determine if the emergency situation presents a serious threat to human health inside and outside the facility.
   (1) Visual Inspection.
   (2) On-site Analytical Capabilities.

7. In response to a fire, explosion or release, the hazardous waste and solvent still activity will be ceased. These areas will be montiored by the solvent still operator for the unlikely occurrence of leaks, pressure build-ups, gas generation and ruptures in pipes or valves, as applicable.

   When the emergency is under control and emergency equipment is de-contaminated, renovated and returned to its proper location, the solvent still can be reactivated.

VII EMERGENCY EQUIPMENT

The following list (Pg. 71b) details the Emergency Equipment used in the event of a Hazardous Waste Emergency. Also included is the location of the equipment with a description of the item and its capabilities. This list will be revised in the event of additions or deletions to the Hazardous Waste emergency equipment inventory.

Additional information on spill related emergency equipment can be found on Pg. #62.

When the emergency equipment is utilized, it will be decontaminated and renovated prior to the resumption of Hazardous Waste Storage operations.

VII EMERGENCY EQUIPMENT

ITEM	LOCATION	DESCRIPTION/CAPABILITIES
Sand	.Drum storage building .End of loading dock .End of Parker Street	Dry sand for the control of spills
Shovel	.Drum storage building .End of Parker Street	Handling of sand and contaminated solids
Portable Sump Pumps	.Maintenance storage area	Electric pumps for movement of spilled liquids from sump
Telephone	.Solvent still area (adjacent to hazardous waste storage building)	Explosion-proof; communication access to Emergency Coordinator and response personnel
Fire Hose	.North wall of Building 66 (across Parker St. from storage building)	75 feet of 1 1/2" hose (capable of storage building coverage) 50 gpm discharge capacity
Sprinkler System	.Inside hazardous waste storage building	Exceeds "high hazard protection" (69 ft^2 floor space per sprinkler head) 50 gpm discharge capacity
Fire Extinguisher	.Inside hazardous waste storage building	15 lb. CO_2; Cover AB & C fires A-wood, cloth, paper B-flammable liquids C-electrical
Fire Alarm	.Outside wall of Building 36; approx. 50 ft. from entrance of drum storage building	Notify Fire Dept.

DATE: NOVEMBER 27, 1985
REVISION NO. 0

VIII - EMERGENCY EVACUATION ROUTES

FROM VARIOUS AREAS

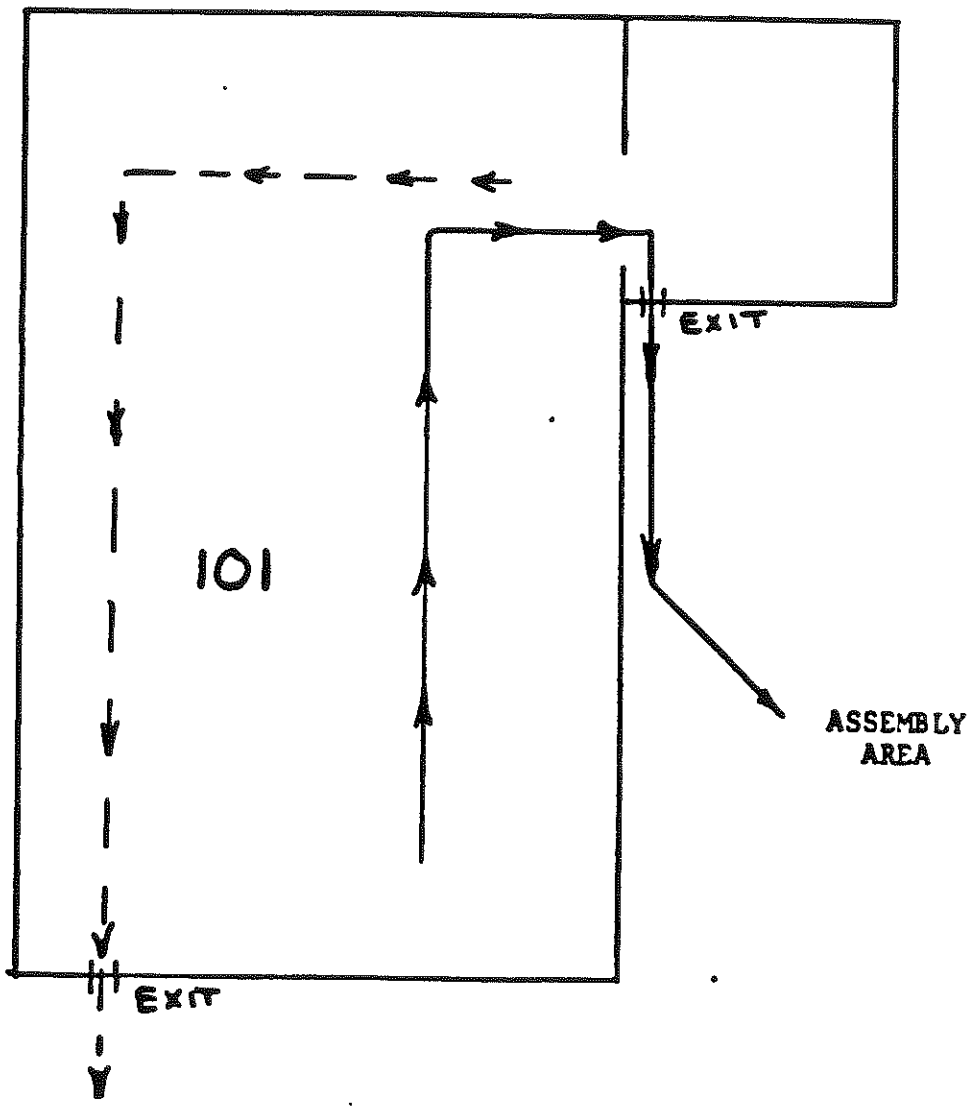
IN THE FACILITY

DATE: September 30, 1983
REVISION NO: 1

CHROME PLATING DEPARTMENT
EMERGENCY EVACUATION ROUTES

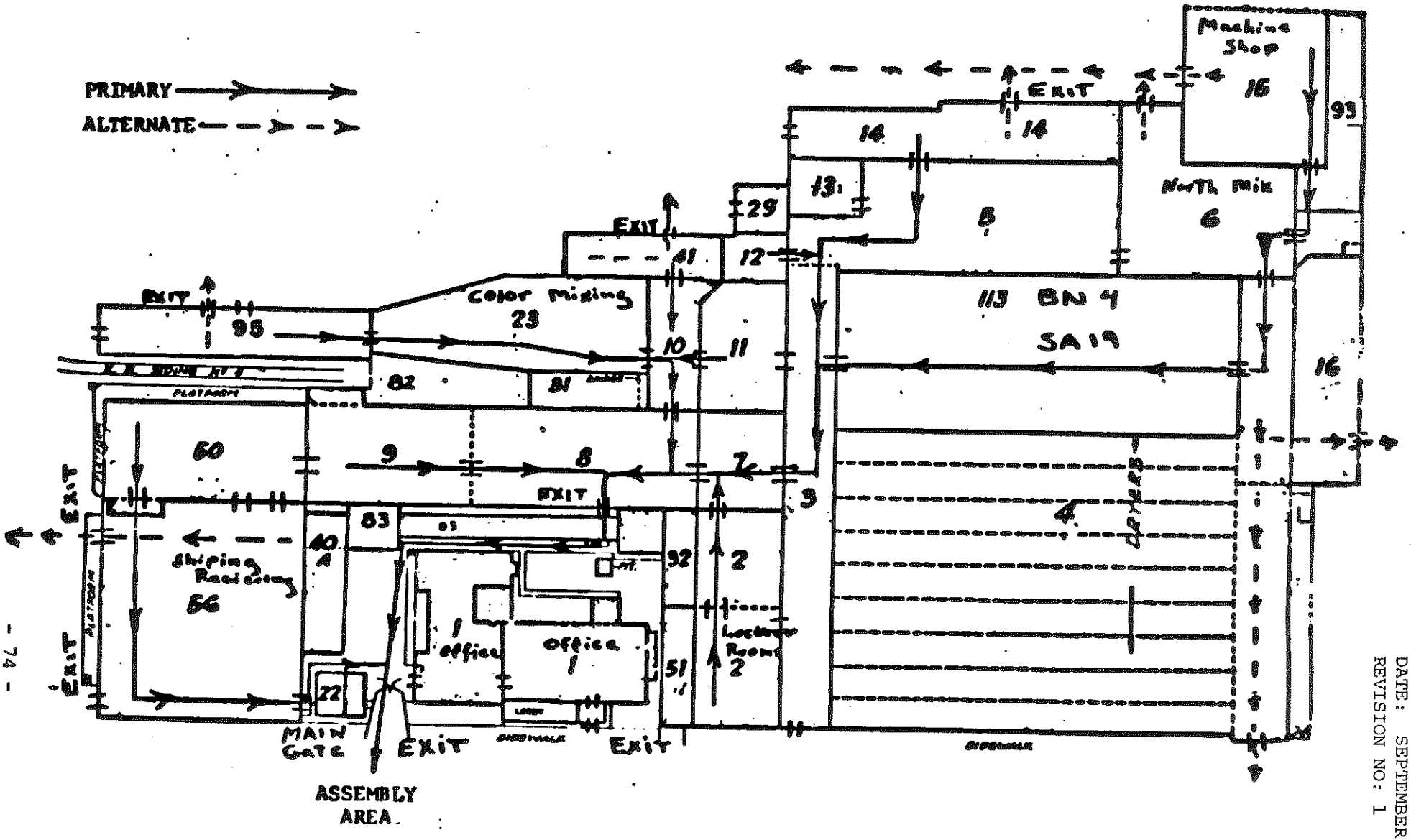
PRIMARY

ALTERNATE



IMMEDIATELY FOLLOWING EMERGENCY EVACUATION, CHROME PLATING DEPARTMENT EMPLOYEES MUST REPORT TO THE DESIGNATED ASSEMBLY AREA FOR ROLL CALL.

NORTH COATING, MIXING, MA NANCE, SHIPPING AND RECEIVING
EMERGENCY EvACUATION ROUTE



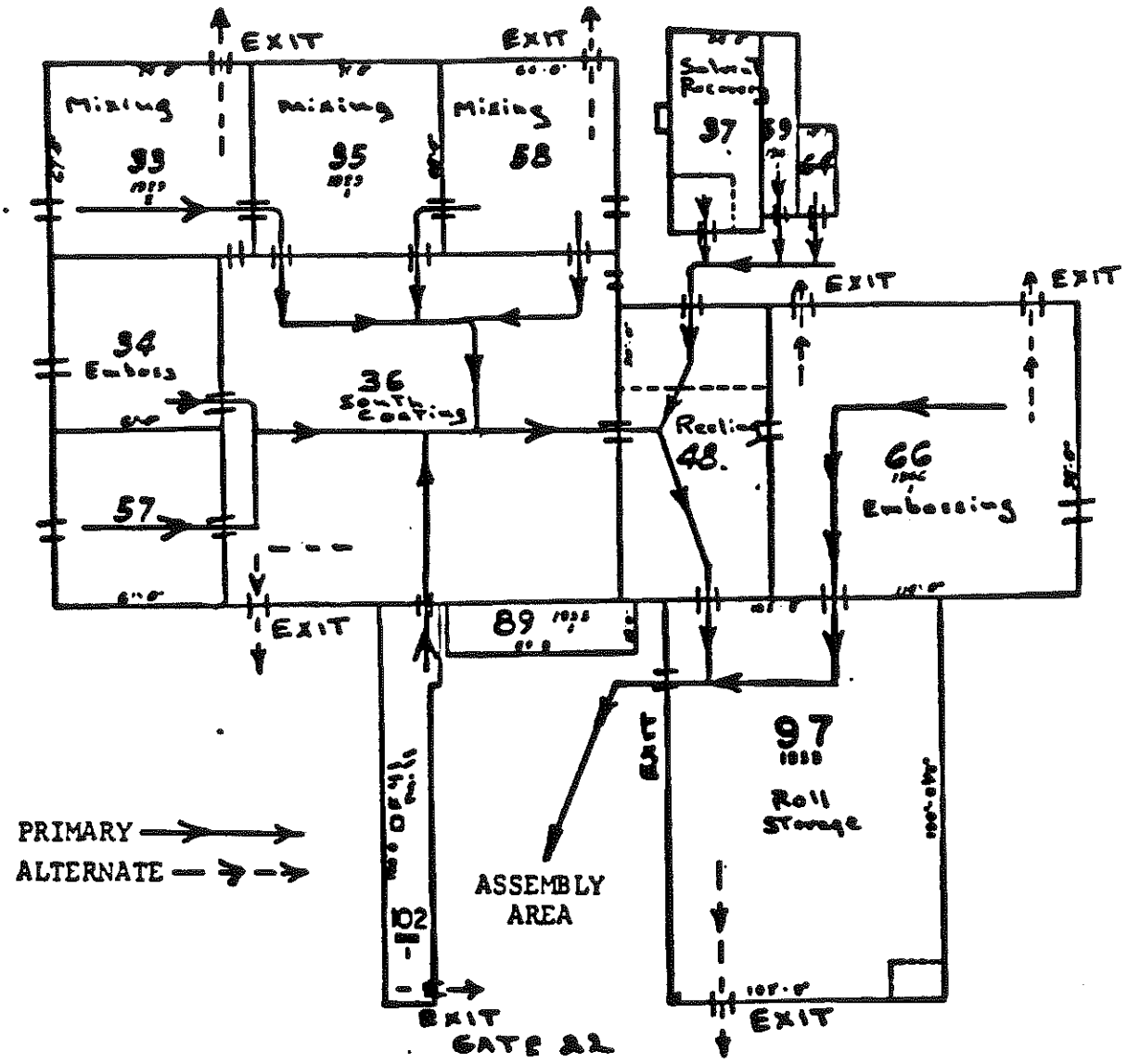
IMMEDIATELY FOLLOWING EVACUATION, NORTH COATING, MIXING, MAINTENANCE, SHIPPING AND RECEIVING DEPARTMENT EMPLOYEES MUST REPORT TO THE DESIGNATED ASSEMBLY AREA FOR ROLL CALL.

DATE: SEPTEMBER 30, 1983
REVISION NO: 1

SOUTH COATING, MIXING, SOLVENT RECOVERY
EMBOSSING AND ROLL STACKER DEPARTMENTS

DATE: September 30, 1983
REVISION NO: 1

EMERGENCY EVACUATION ROUTES

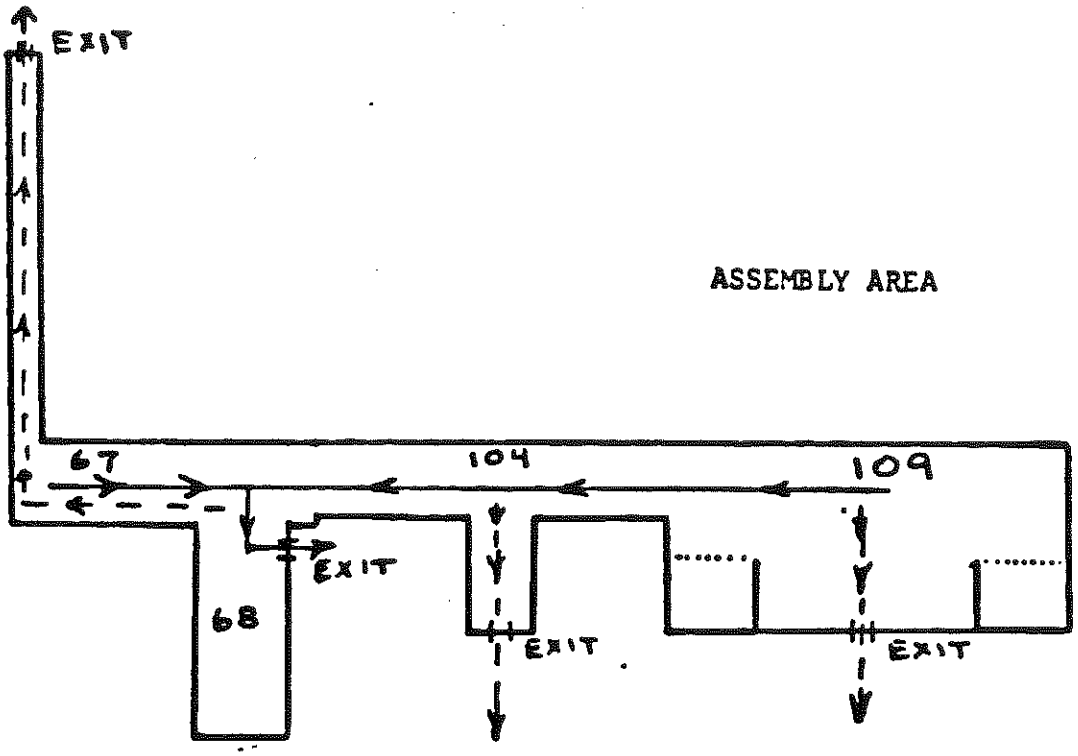


IMMEDIATELY FOLLOWING EMERGENCY EVACUATION, SOUTH COATING, MIXING, SOLVENT RECOVERY, EMBOSSING AND ROLL STACKER EMPLOYEES MUST REPORT TO THE DESIGNATED ASSEMBLY AREA FOR ROLL CALL.

CALENDER PRE-MIX DEPARTMENT

EMERGENCY EVACUATION ROUTE

DATE: September 30, 1983
REVISION NO: 1



PRIMARY ——→

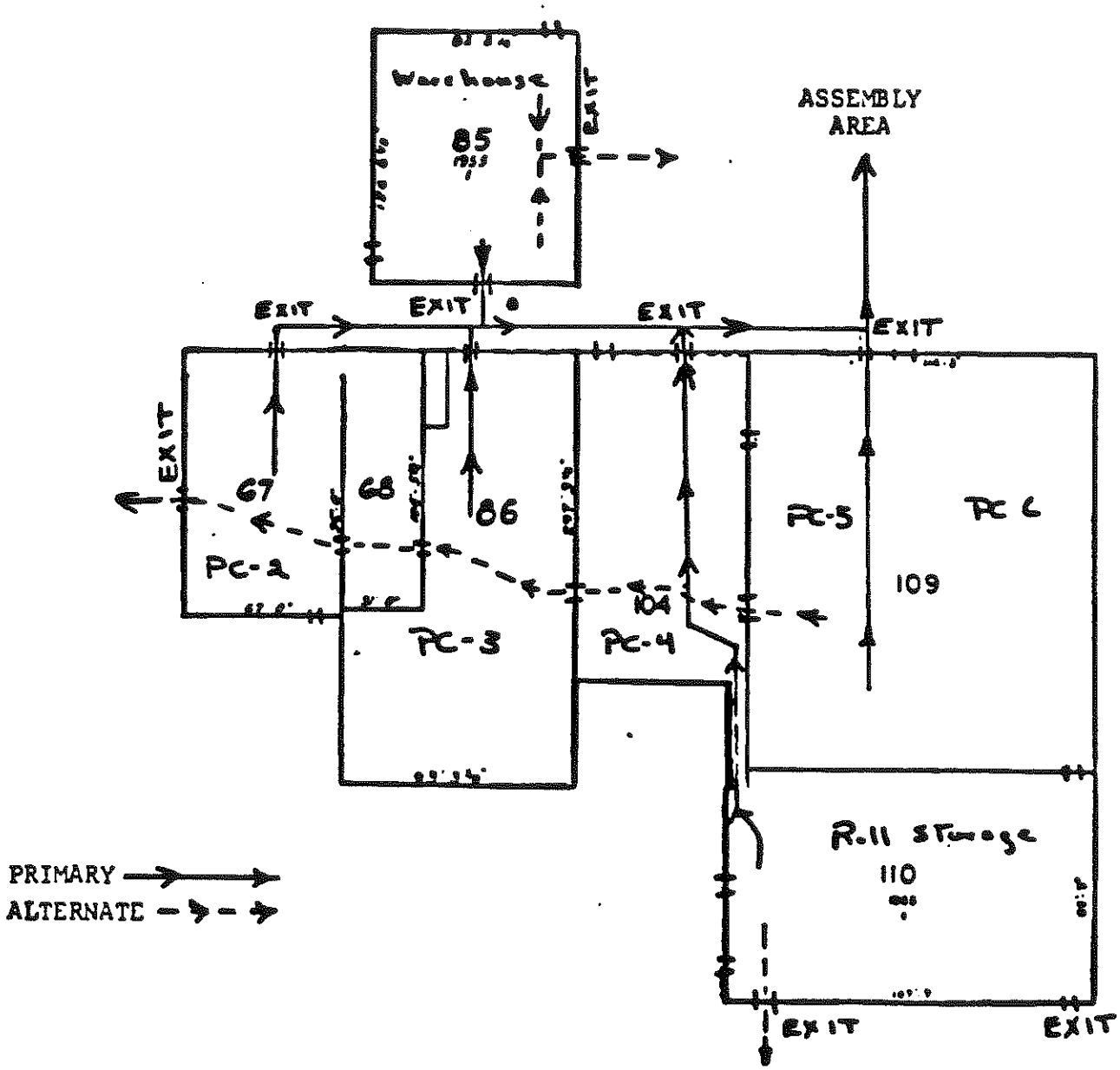
ALTERNATE →- - →- -

IMMEDIATELY FOLLOWING EMERGENCY EVACUATION CALENDER PRE-MIX EMPLOYEES MUST REPORT TO THE DESIGNATED ASSEMBLY AREA FOR ROLL CALL.

CALENDER DEPARTMENT

DATE: September 30, 1983
REVISION NO: 1

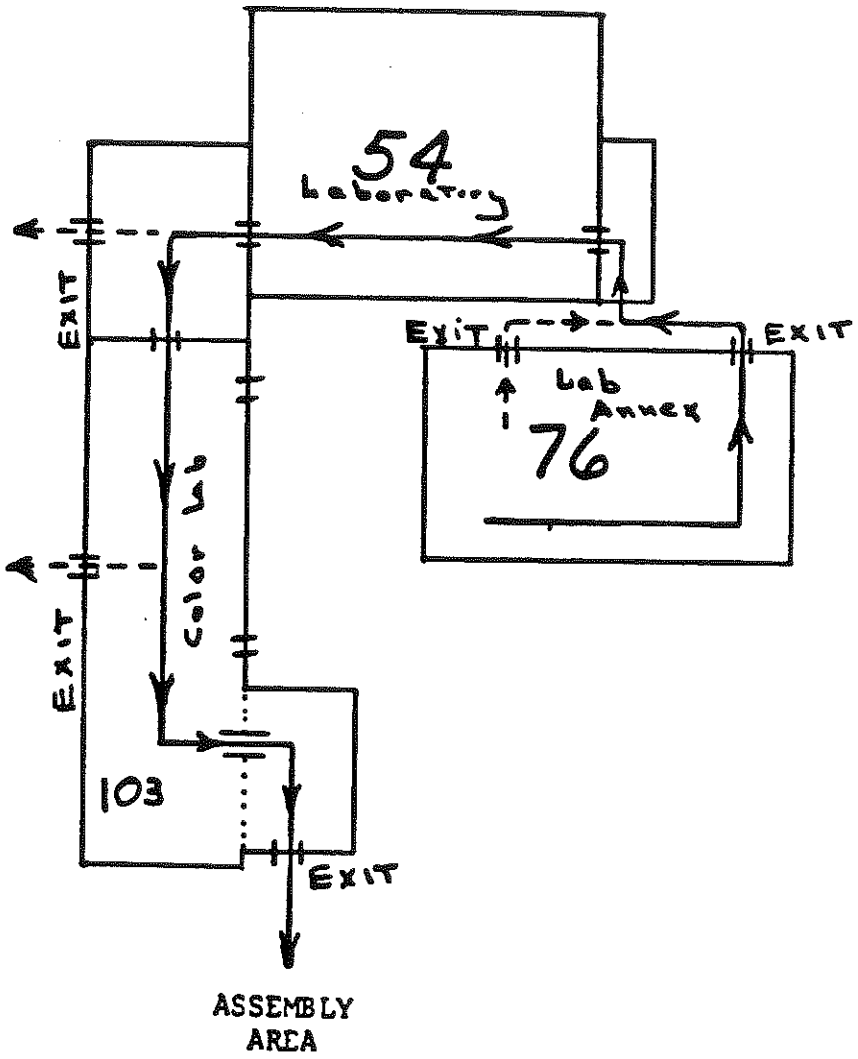
EMERGENCY EVACUATION ROUTES



IMMEDIATELY FOLLOWING EMERCENCY EVACUATION, CALENDER AND ROLL STACKER EMPLOYEES MUST REPORT TO THE DESIGNATED ASSEMBLY AREA FOR ROLL CALL.

LABORATORY FIRST FLOOR
EMERGENCY EVACUATION ROUTES

DATE: September 30, 1983
REVISION NO: 1



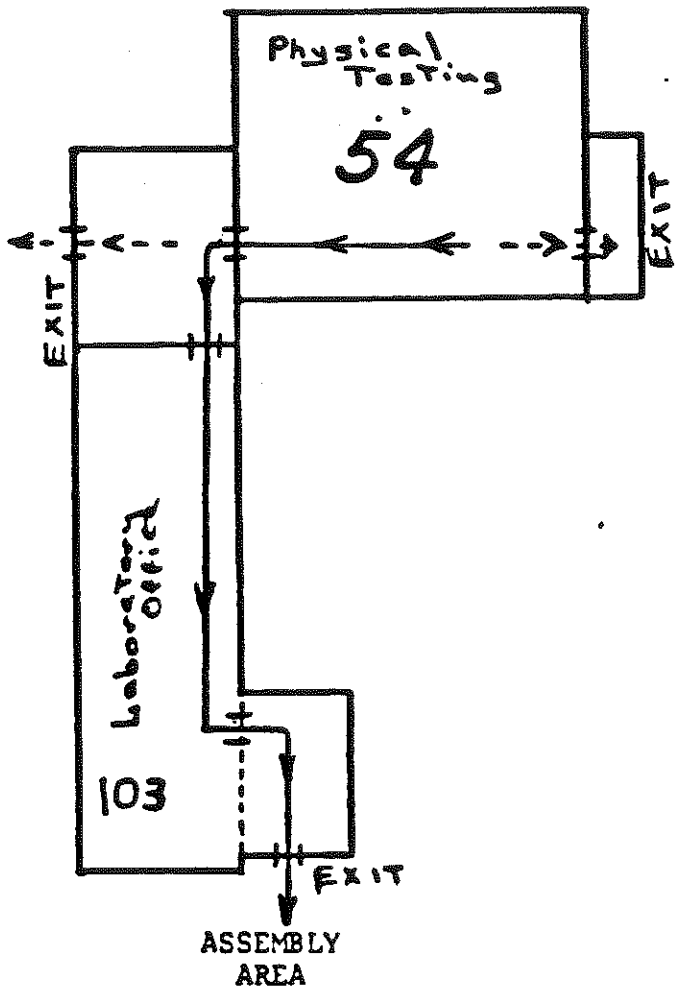
PRIMARY →

ALTERNATE - - →

IMMEDIATELY FOLLOWING EVACUATION, LABORATORY EMPLOYEES MUST REPORT TO THE DESIGNATED ASSEMBLY AREA FOR ROLL CALL.

LABORATORY SECOND FLOOR
EMERGENCY EVACUATION ROUTES

DATE: September 30, 1983
REVISION NO: 1



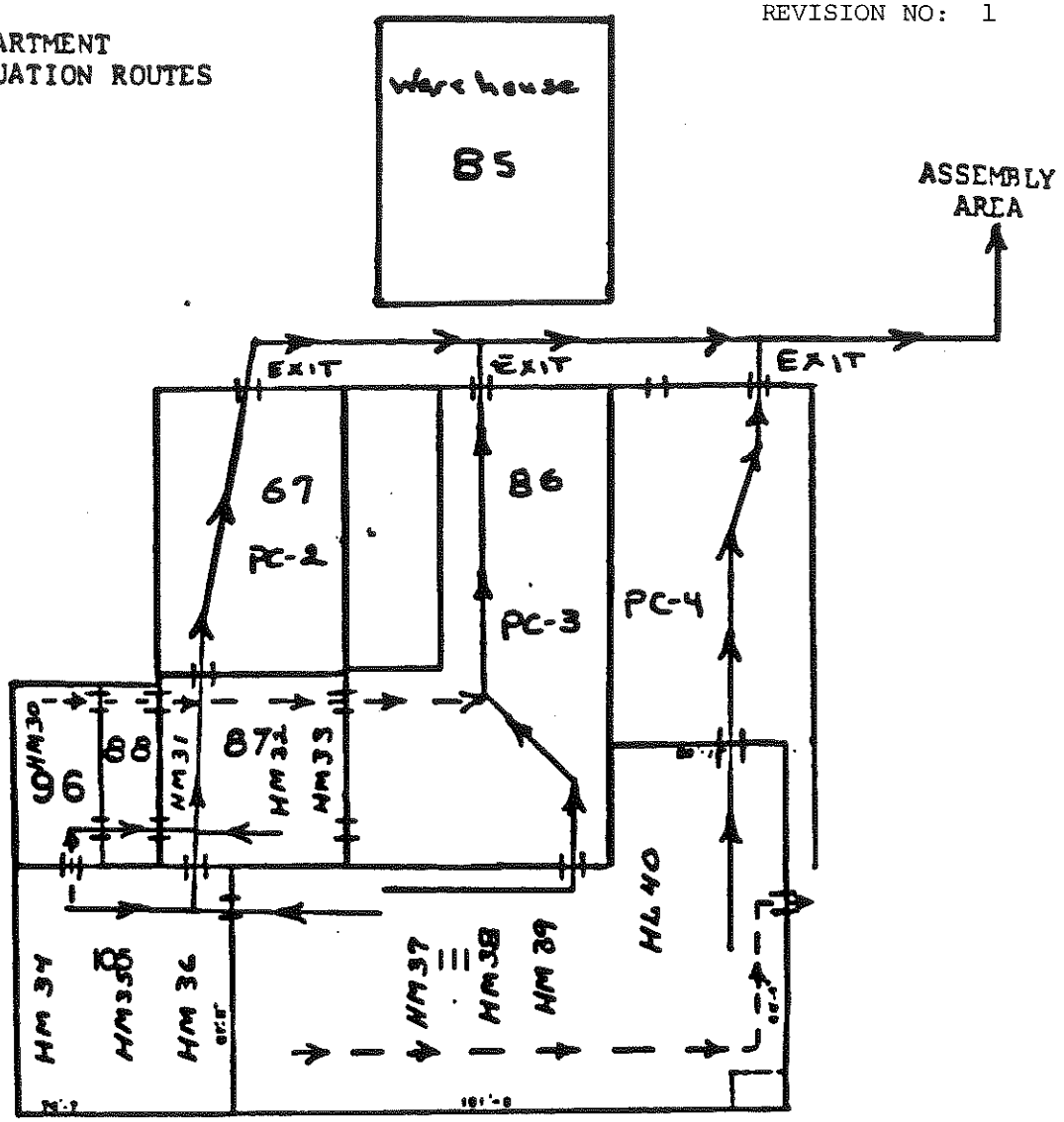
PRIMARY ——→

ALTERNATE — → — →

IMMEDIATELY FOLLOWING EVACUATION, LABORATORY EMPLOYEES MUST REPORT TO THE DESIGNATED ASSEMBLY AREA FOR ROLL CALL.

DATE: September 30, 1983
REVISION NO: 1

PRINT DEPARTMENT
EMERGENCY EVACUATION ROUTES



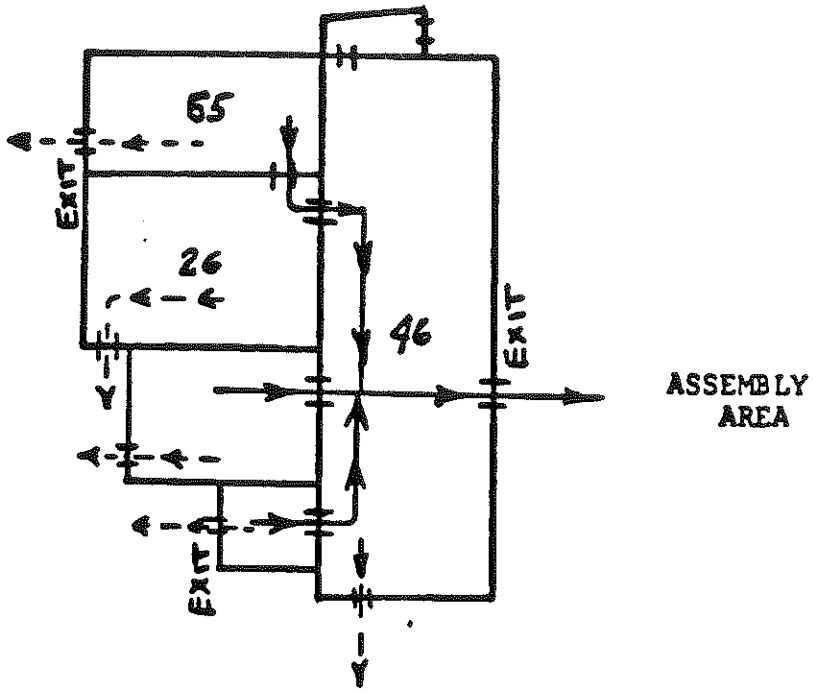
PRIMARY ——→——→

ALTERNATE — → — →

IMMEDIATELY FOLLOWING EVACUATION, PRINT DEPARTMENT EMPLOYEES MUST REPORT TO THE DESIGNATED ASSEMBLY AREA FOR ROLL CALL.

SAMPLE DEPARTMENT
EMERGENCY EVACUATION ROUTE

DATE: September 30, 1983
REVISION NO: 1



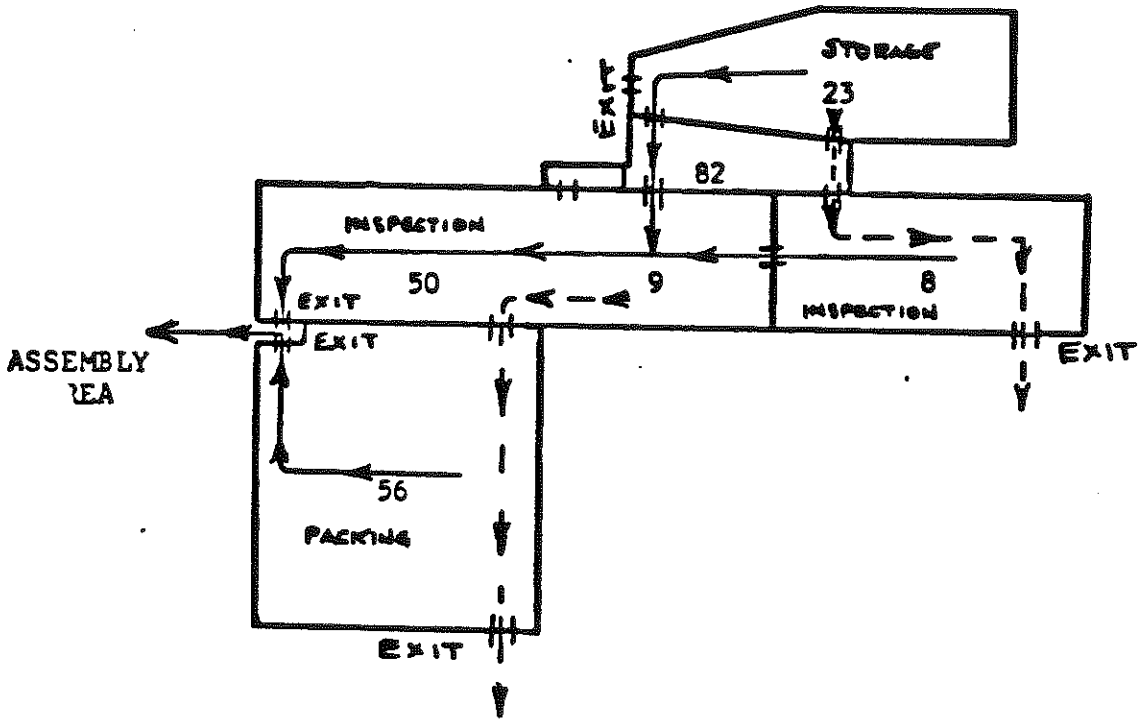
PRIMARY →

ALTERNATE → — → — — →

IMMEDIATELY FOLLOWING EVACUATION, SAMPLE DEPARTMENT EMPLOYEES MUST REPORT TO THE DESIGNATED ASSEMBLY AREA FOR ROLL CALL.

DATE: September 30, 1983
REVISION NO: 1

CUSTOM INSPECTION/PACKING
EMERGENCY EVACUATION ROUTE



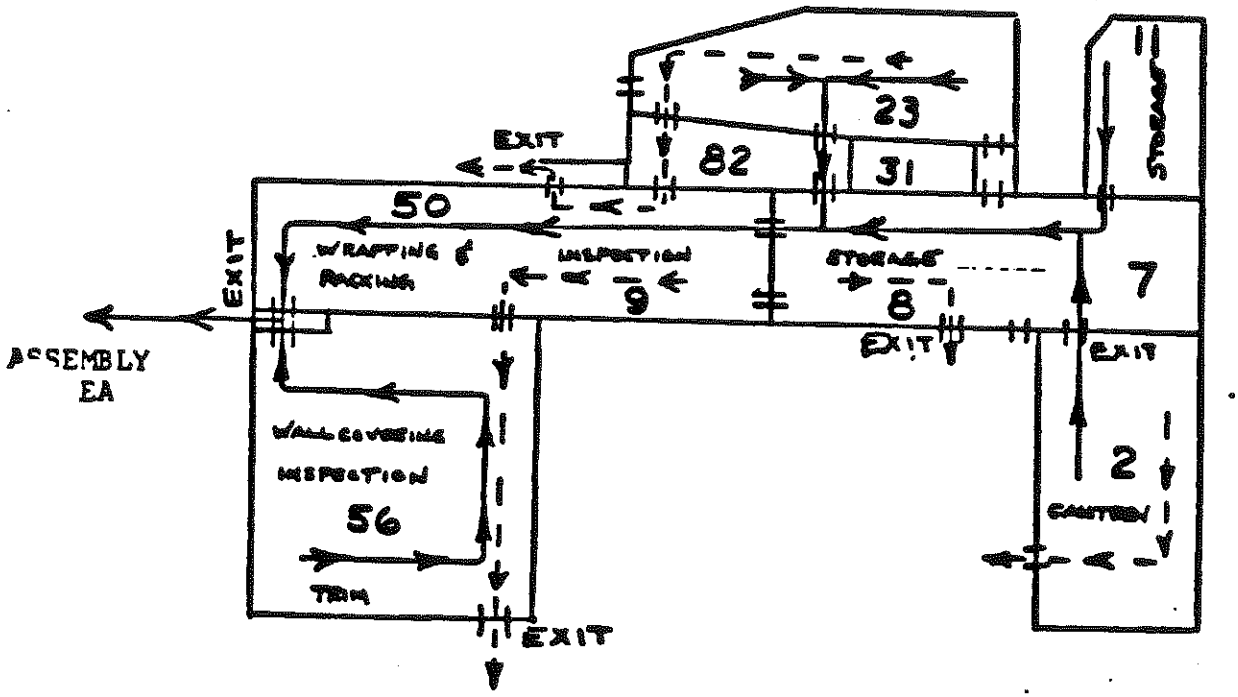
PRIMARY ——→

ALTERNATE →- - →

- IMMEDIATELY FOLLOWING EVACUATION, CUSTOM INSPECTION AND PACKING DEPARTMENT EMPLOYEES MUST REPORT TO THE DESIGNATED ASSEMBLY AREA FOR ROLL CALL.

WALLCOVERING INSPECTION, WRAPPING AND PACKING
EMERGENCY EVACUATION ROUTE

DATE: September 30, 1983
REVISION NO: 1



PRIMARY →

ALTERNATE → - - - →

IMMEDIATELY FOLLOWING EVACUATION, WALLCOVERING INSPECTION, WRAPPING, PACKING AND TRIM DEPARTMENT EMPLOYEES MUST REPORT TO THE DESIGNATED ASSEMBLY AREA FOR ROLL CALL.

IX - WRITTEN REPORT SPECIFICATIONS

Any incident that requires implementation of the contingency plan will be recorded in the operating record as to the time, date and details.

Within 15 days following the incident, a written report will be submitted to the Regional Administrator and the appropriate Ohio EPA authority.

This report will include:

1. Name, addresses and telephone numbers as follows:

   a. Columbus Coated Fabrics (614) 225-6274
   1280 North Grant Avenue
   Columbus, Ohio 43201

   b. Borden Inc. (614) 225-4000
   180 East Broad Street
   Columbus, Ohio 43215

2. Date, time and type of incident.

3. Name and quantity of material(s) involved.

4. Extent of injuries, if any.

5. An assessment of actual or potential hazards to human health or the environment, if applicable.

6. Estimate quantity and disposition of recovered materials resulting from the incident.

DATE: November 21, 1983

REVISION NO. 2

X - LETTERS OF TRANSMITTAL

In order to familiarize the local fire, police and hospitals on the properties of the wastes handled and the fire and emergency access routes, the contingency plan has been submitted to these aforementioned agencies. As any updates of the contingency plan, as initiated, they will be forwarded to these agencies.

The following letters indicate the submission of contingency and emergency evacuation plans in order to fulfill coordination agreement requirements.

The hazards represented by the wastes handled and the potential exposure to these hazards are of particular value to the agencies receiving the contingency plan. This information is located on pages 62a, 62b, 62c, 62d, 62e, and 62f.

COLUMBUS COATED FABRICS
Division of BORDEN CHEMICAL, BORDEN INC.

BORDEN™

June 7, 1982

Earl Burden,
Police Chief
City of Columbus
Police Division
120 West Gay Street
Columbus, Ohio 43215

Dear Chief Burden:

Attached is the Spill Prevention Control and Countermeasures Plan and the Emergency Action Plan for the Columbus Coated Fabrics facility at 1280 North Grant Avenue. These are being supplied to you in order to comply with the RCRA regulations.

Please supply these plans to the appropriate persons. These forms are to be considered confidential since Columbus Coated Fabrics feels there is proprietary information contained therein. Please use your discretion in disclosing the process chemical information only as is necessary in carrying out your required function.

Sincerely,

William G. Ilg
Sr. Project Engineer
COLUMBUS COATED FABRICS
Division of Borden Chemical,
Borden Inc.

/db
Attachments

1280 NORTH GRANT AVENUE, COLUMBUS, OHIO 43216 · TELEPHONE (614) 225-4000 · TELEX 246-670

COLUMBUS COATED FABRICS
Division of
BORDEN CHEMICAL, BORDEN INC.

BORDEN

June 7, 1982

Raymond R. Fadley
Fire Chief
Division of Fire
City of Columbus
200 Greenlawn Avenue
Columbus, Ohio 43223

Dear Chief Fadley:

Attached is the Spill Prevention Control and Countermeasures Plan and the Emergency Action Plan for the Columbus Coated Fabrics facility at 1280 North Grant Avenue. These are being supplied to you in order to comply with the RCRA regulations.

Please supply these plans to the appropriate persons. These forms are to be considered confidential since Columbus Coated Fabrics feels there is proprietary information contained therein. Please use your discretion in disclosing the process chemical information only as is necessary in carrying out your required function.

Sincerely,

William G. Ilg
Sr. Project Engineer
COLUMBUS COATED FABRICS
Division of Borden Chemical,
Borden Inc.

/db
Attachments

1280 NORTH GRANT AVENUE, COLUMBUS, OHIO 43216 · TELEPHONE (614) 225-4000 · TELEX 246-670

COLUMBUS COATED FABRICS
Division of BORDEN CHEMICAL, BORDEN INC.

BORDEN

June 7, 1982

Riverside Hospital
Administration
3535 Olentangy River Road
Columbus, Ohio 43214

Gentlemen:

Attached is the Spill Prevention Control and Countermeasures Plan and the Emergency Action Plan for the Columbus Coated Fabrics facility at 1280 North Grant Avenue. These are being supplied to you in order to comply with the RCRA regulations.

Please supply these plans to the appropriate persons. These forms are to be considered confidential since Columbus Coated Fabrics feels there is proprietary information contained therein. Please use your discretion in disclosing the process chemical information only as is necessary in carrying out your required function.

Sincerely,

William G. Ilg
Sr. Project Engineer
COLUMBUS COATED FABRICS
Division of Borden Chemical,
Borden Inc.

/db
Attachments

1280 NORTH GRANT AVENUE, COLUMBUS, OHIO 43216 • TELEPHONE (614) 225-4000 • TELEX 246-670

COLUMBUS COATED FABRICS
Division of
BORDEN CHEMICAL, BORDEN INC.

BORDEN

June 7, 1982

Grant Hospital
Administration
300 East State Street
Columbus, Ohio 43215

Gentlemen:

Attached is the Spill Prevention Control and Countermeasures Plan and the Emergency Action Plan for the Columbus Coated Fabrics facility at 1280 North Grant Avenue. These are being supplied to you in order to comply with the RCRA regulations.

Please supply these plans to the appropriate persons. These forms are to be considered confidential since Columbus Coated Fabrics feels there is proprietary information contained therein. Please use your discretion in disclosing the process chemical information only as is necessary in carrying out your required function.

Sincerely,

William G. Ilg

William G. Ilg
Sr. Project Engineer
COLUMBUS COATED FABRICS
Division of Borden Chemical,
Borden Inc.

/db
Attachments

1280 NORTH GRANT AVENUE, COLUMBUS, OHIO 43216 · TELEPHONE (614) 225-4000 TELEX 246-670

COLUMBUS COATED FABRICS
Division of Borden Chemical, Borden Inc.

BORDEN

June 7, 1982

University Hospital
Administration, S-101 Rhodes Hall
450 West 10th Avenue
Columbus, Ohio 43210

Gentlemen:

Attached is the Spill Prevention Control and Countermeasures Plan and the Emergency Action Plan for the Columbus Coated Fabrics facility at 1280 North Grant Avenue. These are being supplied to you in order to comply with the RCRA regulations.

Please supply these plans to the appropriate persons. These forms are to be considered confidential since Columbus Coated Fabrics feels there is proprietary information contained therein. Please use your discretion in disclosing the process chemical information only as is necessary in carrying out your required function.

Sincerely,

William G. Ilg
Sr. Project Engineer
COLUMBUS COATED FABRICS
Division of Borden Chemical,
Borden Inc.

/db
Attachments

1280 NORTH GRANT AVENUE, COLUMBUS, OHIO 43216 · TELEPHONE (614) 225-4000 TELEX 246-670

COLUMBUS COATED FABRICS
Division of
BORDEN CHEMICAL, BORDEN INC.

BORDEN

June 7, 1982

Doctors Hospital - North
Administration
1087 Dennison Avenue
Columbus, Ohio 43201

Gentlemen:

Attached is the Spill Prevention Control and Countermeasures Plan and the Emergency Action Plan for the Columbus Coated Fabrics facility at 1280 North Grant Avenue. These are being supplied to you in order to comply with the RCRA regulations.

Please supply these plans to the appropriate persons. These forms are to be considered confidential since Columbus Coated Fabrics feels there is proprietary information contained therein. Please use your discretion in disclosing the process chemical information only as is necessary in carrying out your required function.

Sincerely,

William G. Ilg
Sr. Project Engineer
COLUMBUS COATED FABRICS
Division of Borden Chemical,
Borden Inc.

/db
Attachments

COLUMBUS COATED FABRICS
Division of Borden Chemical, Borden Inc.

BORDEN

June 7, 1982

OEPA
Mr. Ken Schultz
Chief, Emergency Response Section
361 East Broad Street
P.O. Box 1049
Columbus, Ohio 43216

Dear Mr. Schultz:

Attached is the Spill Prevention Control and Countermeasures Plan and the Emergency Action Plan for the Columbus Coated Fabrics facility at 1280 North Grant Avenue. These are being supplied to you in order to comply with the RCRA regulations.

Sincerely,

William G. Ilg
Sr. Project Engineer
COLUMBUS COATED FABRICS
Division of Borden Chemical,
Borden Inc.

/db
Attachments

1280 NORTH GRANT AVENUE, COLUMBUS, OHIO 43216-TELEPHONE (614) 225-4000-TELETYPE 810 482-1749-TELEX 25-5432

(8) PROCEDURES AND EQUIPMENT FOR HAZARD ABATEMENT

(8) Procedures and Equipment for Hazard Abatement

(i) Present Hazards in Unloading Operations:

(a) Dock is approximately same level as bed of trucks.

(b) Dock plates are used to bridge between dock and truck bed during loading and unloading.

(c) In the unlikely event of a spill drum loading or unloading process (eg. punctured drum or dropped drum from a loading dock), the spill will be contained on the concrete apron with sand and/or absorbent pads as stated in the Spill Prevention & Containment Plan - see Section 7.

(ii) Prevention of Run Off from Hazardous Waste Handling Areas

(a) Storage area is covered and contained as described in Section (b), Item (1) Container Storage Description.

(b) Sand and/or absorbent pads provided to prevent run off - see Section 7 (Contingency Plan).

(iii) Prevent Contamination of Water Supplies

(a) See above (ii) for run off control.

(b) All drum handling and drum hauling is conducted on impervious reinforced concrete. All drum storage is also on impervious concrete.

(iv) Mitigate Effects of Equipment Failure and Power Outages

(a) Procedures for hauling hazardous wastes are not subject to hazards due to equipment failure.

(b) In the unlikely scenario of a spill from a drum combined with a power outage, hand pumps and/or air pumps will be used to transfer contained spill into hazardous waste drums. Personnel are instructed to not handle hazardous wastes during a power outage.

(v) Prevention of Undue Exposure of Personnel to Hazardous Waste

(a) Hazardous waste handling personnel are issued shirts, trousers, aprons, gloves and safety glasses.

(9) Ignition Precautions

(i) No smoking is permitted within the boundries of the entire facility except in the office and certain specified areas (none of which are in the vicinity of the hazardous waste storeage building).

(ii) Heating in the hazardous waste storage building is accomplished by steam.

(iii) The heat source for the solvent recovery still is likewise steam.

(iv) As stated on Pg. #129, there are no incompatible materials stored in the hazardous waste storage building; therefore, no measures have been taken to separate the stored materials from each other.

(v) No Smoking signs are posted on the hazardous waste storage building.

(10) Traffic Patterns

Refer to Figure #4

The trucks arriving at the facility - in order to load Hazardous Waste Drums - arrive at the south gate of the plant (Gate #5) via 5th Avenue (a two way city street). Trucks arriving from the east turn right into the plant thru Gate #5. Trucks arriving from the west turn across eastbound traffic on 5th Avenue into the facility thru Gate #5. A traffic light is located at the corner of 5th and Grant Avenues.

After the trucks have entered the gate, they turn around on the concrete apron area immediately south of the loading dock and back into the loading dock.

5th Avenue is a main city throughfare and is paved as such in order to receive all classes of traffic. The internal plant roadway, apron and ramp are all reinforced concrete. The roadway and apron are capable of sustaining the load of a tractor and trailer (60,000 lbs maximum, see below), and the ramp into the loading dock area is capable of sustaining the weight of a loaded forklift.

The Waste Drums are loaded into closed semi-trailers. An average load consists of 76 drums. The approximate curb weight of the tractor trailers combination is 26,000 lbs. The approximate drum weight is 450 lbs each for a loaded drum weight of 34,200 lbs. Therefore, the total loaded weight of the tractor and trailer is approximately 60,000 lbs. This will not be exceeded.

The Hazardous Waste Drums are removed from the Hazardous Waste Storage Building on a forklift truck. The truck lifts 4 drums (on a pallet) and proceeds down the internal plant roadway to the ramp - thence on the ramp to the loading dock and into the closed trailer truck.

(11) Facility Location Information (Seismic and Flood Plain)

Not applicable.

(12) Personnel Training

(i) Figure 9 shows the organization of personnel at the facility. Management responsibilities involving actual handling of the wastes are split between the Hazardous Waste Management Coordinator, the Production of Waste Coordinator, and the Transportation Coordinator. Maintenance personnel (i.e. electricians and mechanics) work in the waste handling area when required to fix a malfunctioning piece of equipment, but they do not handle wastes directly.

(ii) Relative to and in response to emergencies, communication and alarm systems; hazardous waste personnel are trained in the classroom and on the job (automatic waste feed cut-off systems and ground water contamination responses are not applicable to the hazardous waste handling at CCF).

The safety director coordinates the training activity with the hazardous waste area foreman. The foreman oversees the training of the operators. The present operators assist the foreman in the training of new operators.

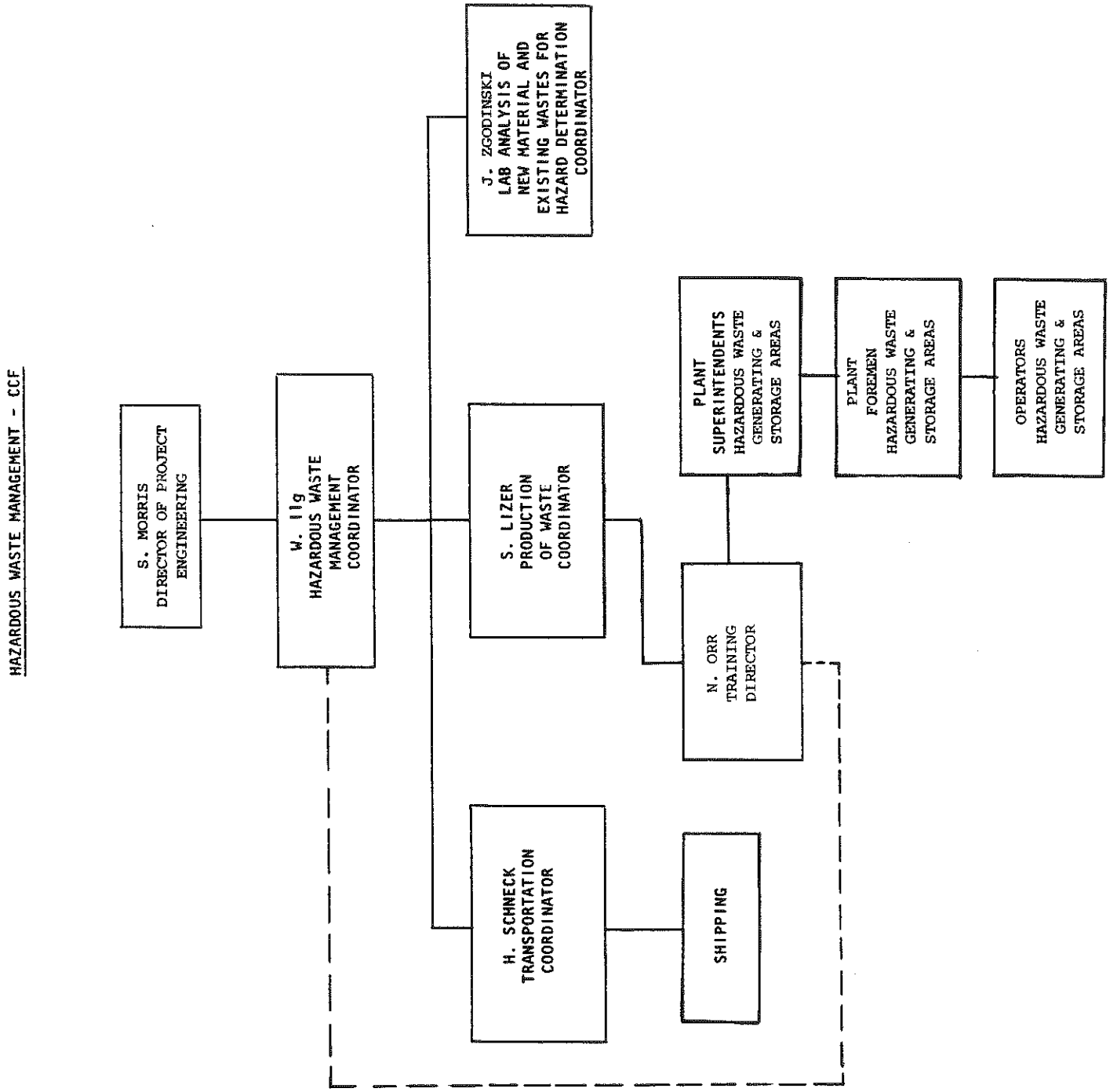
The safety director follows up in order to insure proper procedures are followed. Based on his observations, the safety director will change the training as he deems necessary.

(iii) The candidates for the positions described must have sufficient skills to fulfill the responsiblities listed.

(iv) The duties, responsibilities and qualifications of each position follow:

DATE: February 4, 1983
REVISION NO: 1

FIGURE 9



DATE: February 4, 1983
Revision No: 1

Position Title: Hazardous Waste Management Coordinator

Name of Employee: William G. Ilg

Position Responsibilities and Duites:

- Coordinates all hazardous waste activities.
- Obtains all required permits and licenses or modifications of same from local, state, and Federal regulatory bodies.
- Resolves problems involving permits and licenses from local, state, and Federal regulatory agencies.
- Reports to Plant Engineer.
- Inspects plant grounds and all facilities for status of air, water, and solid/hazardous waste emissions and controls.
- Consults with maintenance foreman on questions involving emergency action.
- Drafts and submits all required reports to EPA or the State.
- Advises training director as to specific training details for hazardous waste handling.

Experience and Qualifications:

- Mechanical Engineering Degree.
- 2½ years experience in industrial pollution control management.
- Attended seminars on Hazardous Wastes Management and Control and DOT regulations concerning Hazardous wastes.
- Member of the Environmental Committee of the Chemical Fabrics & Film Association.

Position Title: Production Of Waste Coordinator

Name of Employee: Sam Lizer

Position Responsibilities and Duites:

- Overall operation and maintenance of the hazardous waste storage facility.
- Maintains facility compliance with RCRA and other permits.
- Oversees operators and reviews their performance in particular in the areas of:

  Operate materials/drum handling equipment safely and effectively. Handle leaks, spills, and emergency situations.

- Notifies plant environmental engineer, General Manager, and if so directed, proper authorities in emergency situations.
- Schedules all maintenance and repairs to structures and equipment for HWM facility.
- Is responsible for mechanic/electrician doing both scheduled and unscheduled maintenance and repair work to be sure he is not releasing hazardous wastes to the environment or contaminating himself.

Experience and Qualifications:

- 30 years experience in plant operation.
- Attended college for two years - majoring in Chemical Engineering.

DATE: February 4, 1983
REVISION NO: 0

Position Title: Safety Director

Name of Employee: Norman Orr

Position Responsibilities And Duties
(Pertaining to Hazardous Waste)

- Supervision of plant foremen in hazardous waste training.
- Maintaining training records of personnel handling hazardous waste.
- Makes periodic inspections and observations of hazardous waste handling.
- Follows up to insure proper procedures are being followed and discrepancies are corrected.

Experience and Qualifications

- B.S. Degree
- Attended Corporate Session on Overview of Hazardous Waste Regulations
- National Safety Academy Training Seminar

Position Title: Foreman

Position Responsibilities:

- Reports to Superintendant
- Inspects tanks, drums, and other storage equipment, and any gauges, dials, and recorders as required for proper operation and structural integrity.
- Inspects drum storage area for evidence of leaks and spills and inappropriately placed drums.
- Inspects emergency equipment on a regular basis.
- Assists in training of new operators and mechanics to handle hazardous waste spills and leaks safely and in such a way as to avoid exposures.
- Makes appropriate entries into operating log, monitoring records, inspection records, and maintenance records, and files them according to established system.
- Notifies Superintendant and other plant authorities as necessary in emergency situations.
- Takes emergency action on own authority in accordance with established procedures.

Note: If applicant has no hazardous waste experience, special training in the functions and operation of a hazardous waste storage facility will be required before assuming job responsibilities. This training will be provided by Columbus Coated Fabrics.

Position Title: Operators

Position Responsibilities:

- Reports to area operations foreman.
- Operates waste handling equipment.
- Reviews all incoming wastes and assigns wastes to proper storage location.
- Reports malfunctions and problems with tanks, drums, and other storage equipment, and any gauges, dials, and recorders as required for proper operation and structural integrity.
- Reports any evidence of leaks and spills and inappropriately placed drums.
- Assists in training of new operators and mechanics to handle hazardous waste spills and leaks safely and in such a way as to avoid exposures.
- Makes appropriate entires into operating log.
- Notifies foreman and other plant authorities as necessary in emergency situations.
- Takes emergency action on own authority in accordance with established procedures.

ii. Following are copies of typical operating record sheets documenting the training of the involved personnel handling hazardous wastes.

Figure 10

DATE: February 4, 1983
Revision 1

TRAINING PROGRAM File — Solvent Recovery

	NAME	DATE	INSTRUCTOR	ADDITIONAL REMARKS
1	Chester Holland	6-21-82	EV Burleson	
2	Brian Andrews	6-21-82	J Horne	
3				
4				
5				
6				
7				
8				

AN UP-Date of TRAINING EVERY SIX MONTH

1.				
2				
3.				
4				
5				
6				
7				
8				

Figure 11

DATE: February 4, 1983
REVISION NO. 1

HAZARDOUS WASTE HANDLING

PLASTIC PRE-MIX DUST STOP OIL

Removing oil and residue from banburys

Using proper containers for oils and residue

Using proper labels on containers

Storing full containers in designated areas

I have been instructed in the above procedures for handling of hazardous waste materials.

Signed: Employee _____

Instructor _____

Date: 7-26-82

(iii) Training in Hazardous Waste Handling is an element of the general training for the involved personnel.

(iv) Initial employee indoctrination by the Safety Manager concerning safety in the facility involves a discussion of Hazardous Wastes.

FORM 1022C

DATE: May 6, 1983
REVISION NO.: 0

INTER-COMPANY AND OFFICE CORRESPONDENCE

TO: WHOM IT MAY CONCERN

FROM: NORMAN ORR

LOCATED AT:

(Dept. Branch Division Company

SUBJECT:

DATE: MAY 3, 1983

Included in the Hazardous Waste Handling training sessions, is an explanation of the chemicals, Lead, Chromium and Cadmium, that are present in waste products developed at Solvent Recovery and Calender Pre-Mix departments. Employees are informed that these chemicals are hazardous to their health under over exposed conditions. OSHA approved respirators are available and all employees are instructed on the proper use of safety equipment.

Norman Orr
Safety Manager

NLO/am

(v) All workers in the facility are thoroughly instructed in the handling of ignitable materials since any of the process materials have a lower ignitability temperature than the various types of hazardous wastes generated.

(a) No ignition sources are allowed in the facility except in designated areas.

(b) No smoking is allowed in entire facility other than in designated areas.

(c) No matches allowed in production areas.

(vi) All workers are instructed in the procedure to be followed in case of a fire and/or emergency.

(vii) All workers are instructed in the location of fire alarms and emergency escape routes.

(viii) The employees working in the Solvent Still area who handle the still bottoms in its liquid and solid form receive training in addition to the standard training given to all employees described in (v), (vi) and (vii) above. This additional training includes all of the following.

(a) The empty hazardous waste drums are placed in a pit at the unloading point for the still. Any spillage encountered in the filling of the drum is therefore contained in the pit.

(b) The still bottoms solid and/or liquid from one batch which normally fill 4 to 5 55 gallon drums are then scraped out of the still into the standard #17E Hazardous Waste Orange Drums.

(c) Any of the solid sludge that has spilled into the pit is manually shovelled into the hazardous waste drums containing the solid form of the waste.

(d) The operator fills the solid waste drums to within 4" to 6" of the top. Any liquid rising to the surface is dipped out into a hazardous waste drum containing still bottom liquid.

(e) The solid waste drum is then checked by means of the Solids Test described on Pg. 37 - (iv). If the check shows any free liquid, adsorbent material and/or ashes are added and mixed until the test indicates the material has met the solid criteria as per the test.

(f) After the solid waste drum has passed the previously described test, the last 4" to 6" of this drum is filled to within 1" of the top with ashes. The last 1" is filled with an adsorbent material such as "floor dry".

(g) The solid sludge drum is then sealed with a lid, gasket and locking ring.

(h) A hazardous waste sticker is placed on the drum stating "Flammable Solid".

(i) A second hazard waste sticker is attached describing the waste and the date the drum was filled with the signature of the operator.

(j) The solid waste drums are also stenciled with the CECOS Hazardous Waste Number (1271-A).

(k) Any liquid that is generated in the still process is placed in a separate liquid waste drum in the pit.

(l) Any of the liquid that has spilled into the pit is pumped into the liquid waste drum.

(m) As previously stated, any liquid from the solid drums is also placed in the liquid drums.

(n) The liquid drums are filled to the top - sealed with a lid, gasket and a locking ring.

(o) A label is affixed stating "Flammable Liquid".

(p) A second label applied to the drum stating the type of hazardous waste with the product waste code number, the date the drum was filled and the name of the operator filling the drum

(q) The liquid hazardous waste drums also are stenciled with the Ross Incineration Product Code (WPS 5485).

(r) After the solid and liquid hazardous waste drums are filled, they are pallatized and placed in the Hazardous Waste Storage Building by means of a fork lift truck.

(s) Any spills occurring on the concrete apron of the work area are contained and immediately cleaned up by the operator with sand and/or an adsorbent material. Any cleaning material used - such as rags, paper, towels, sand or floor dry, is placed into hazardous waste containers for proper disposal.

(t) Employees handling hazardous wastes in the still process are informed of the hazardous chemicals in the waste, i.e. cadmium and lead, and of the ignitability of the solid and liquid forms.

(ix) Employes working in the Banbury Dust Stop Oil and Residue Area:

(a) The oils and residue leaking at the Banbury dust stops are hazardous waste.

(b) This waste is hazardous since it cadmium content is in excess of 1 ppm. The waste is also ignitable (see employee training concerning ignitable material - Part (v) above).

(c) The operator on duty is responsible for the proper handling of this material in his/her working area.

(d) The oil and residue that leaks from the Banbury dust stops into troughs must occasionally be scraped by the operator into a container designed to catch material.

(e) When containers are full, the operator must dispose of the material into proper hazardous waste storage drums - 17E orange drums.

(f) These 55 gallon drums are stored in the Parker Street alley adjacent to the Banbury rooms.

(g) Operators will secure empty hazardous waste drums as required and position in Banbury rooms.

(h) After the flow pans are full, they are emptied into 55-gallon hazardous waste drums. The material is allowed to sit idle over night and the oil then is removed from the top of each drum and put into a separate hazardous waste liquid drum.

(i) When the solid and liquid drums are full, they are sealed, gasketed and a locking ring installed.

(j) The drums are tagged and stenciled with proper tags and EPA numbers, palletized and taken to the hazardous waste storage building for storage.

(k) The oil drums will have a "flammable liquid" label attached as well as a hazardous material label bearing the description of the waste, the date and the signature of the operator.

(l) The drums with residue will have a flammable solid label attached as well as a hazardous material label bearing the description of the waste, date and the name of the operator.

(m) Any spillage of hazardous waste is to be cleaned up immediately.

(n) Any cleaning materials, such as rags, paper towels and floor dry, used in cleaning up spillages must be put into hazardous waste containers for proper disposal.

(o) The drums of residue will have stencilled a CECOS Code Number 2471-C.

(p) The drums of oil are shipped to SYSTECH with a Systech Waste Number of STC-14-2007.

(x) Employees handling hazardous wastes in both these areas are furnished with work uniforms.

(a) If uniforms, due to a spill, become grossly contaminated, they are disposed of as a hazardous waste.

(xi) Plating Sump Area

(a) No CCF personnel directly handle this waste. Hazardous Waste Contractor removes the waste from the pit with a suction hose into a tank truck.

(xii) Implementation of Training Program

All current waste-handling personnel have been fully trained at the time of this submittal. In the future

all new personnel will complete this training program within 6 months of assignment to the hazardous waste storage facility or within 6 months of their date of employment, whichever is later. No employee hired to work at this facility will work unsupervised prior to completion of the training program.

Employees are required to meet bi-annually for review and update of this training program. Furthermore, the following subjects will be discussed and studied:

(a) All hazardous wastes currently being handled at the facility, noting any changes in waste type, volume, source, characteristics, or location that have occurred during the past year.

(b) The status of storage and operating conditions and procedures, noting any areas where there are problems or potential for problems. Employees participate in developing effective solutions.

(c) The requirements contained in the facility's RCRA permit, noting any changes that have occurred during the past year. Areas where maintenance of compliance is a problem are identified and discussed, and effective solutions are sought.

(d) Incidents that have occurred in the past year that warranted use of contingency plans and/or emergency action. This review focuses on the cause of the incident and identification of steps to be taken to prevent or to ensure better handling of such events in the future.

Records documenting the job title for each position,

job descriptions, names of employees, and completed training programs (both introductory and review) will be kept onsite in the safety director's office of CCF. These records will be kept until closure of the facility for current employees and for 3 years from the date of the individual employee's termination for former employees.

DATE: May 6, 1983
REVISION NO: 0

FORM 1022C

BORDEN

INTER-COMPANY AND OFFICE CORRESPONDENCE

TO: DISTRIBUTION

FROM: W. G. Ilg
R. L. Johnston

LOCATED AT: CCF

{ Dept. Branch Division Company

SUBJECT: SPECIFIC OPERATING PROCEDURES RELATIVE TO THE HANDLING AND PROCESSING OF HAZARDOUS WASTE DUST-STOP OILS

DATE: March 30, 1983

Dust-stop oil is residue generated by the Banbury mixing process. Dust-stop oil contains a heavy metal, namely Cadrium, which has been declared a hazardous waste and, consequently, comes under stringent EPA disposal statutes.

Therefore, the following handling, processing and containerization procedures shall be strictly adhered to without any deviation.

Job Classification Responsible - Banbury Operators

1. Two (2) 55 gallon special (orange colored) hazardous waste drums shall be placed in each Banbury room.

   a) One drum shall be used for dust-stop solid waste only.
   b) One drum shall be used for dust-stop oils only.

2. Both drums shall be filled to within one-half inch (1/2") of the top. The drum containing the solid waste shall be free of any oil by pumping; any remaining solution shall be topped off using floor dry and/or ashes. NOTE: It is essential that absolutely no solution be found floating on the top prior to sealing the drum.

3. The drum containing dust-stop oil only will be sealed, placed on a 4 drum pallet and delivered by Dept. #10 Material Handling personnel to the hazardous waste storage building for staging until sufficient drum quantities are accumulated for subsequent removal by licensed hazardous wastes concerns.

4. It is absolutely forbidden to temporarily stage or store empty, but used, part full or full drums of dust-stop waste anywhere in other than the Banbury rooms or the hazardous waste storage building.

W. G. Ilg
Environmental

R. L. Johnston
Standards Engineering

/db

DISTRIBUTION

M. P. Kuskowski
D. H. Bibb
A. Ferguson
M. Z. Spriggs
R. L. McClelland
S. E. Lizer - Information
S. W. Morris - Information
N. L. Orr - Information
C. J. Oshinski - Information

(13) Closure Plan

(i) General Considerations

This plan identifies all steps necessary to close the facility at any point during its intended operating life. This facility consists of interdependent manufacturing processes; furthermore, drum storage of waste is expected to be required to the exclusion of any other regulated hazardous waste management facility. Hence, partial closure details are not applicable.

CCF will maintain an on-site copy of the closure plan and all revisions to the plan until certification of closure completeness has been submitted and accepted by the USEPA Region V and Ohio EPA. CCF will notify Region V and Ohio EPA at least 180 days prior to the date we expect to begin final closure steps.

The date of closure cannot be logically projected as this is an ongoing industrial facility - applying for a permit to temporarily store on-site.

However, if a date must be established for closure of the storage facility to store wastes for greater than 90 days, a date of 2050 will be used (irrespective of the production facility).

Upon completion of closure, CCF and an independent professional engineer will submit certifications of closure in accordance with the specifications in the approved closure plan.

This closure plan will specifically address the closure of the hazardous waste drum storage area and all areas,

equipment, etc., which could potentially be impacted by the hazardous waste. In addition to the drum storage area, these areas include the solvent still area, the Banbury mixers, the electroplating sump and the areas and equipment impacted in the handling and loading of these hazardous wastes. Although other hazardous materials (raw materials, etc.) are handled on-site and will be necessarily handled upon closure of the site, CCF will not address the closure activities associated with the hazardous materials not regulated by hazardous waste regulations.

(ii) Closure Performance Standard

This closure plan was designed (1) to ensure that the plant will not require further maintenance and controls due to hazardous waste, (2) to minimize or eliminate threats to human health and the environment due to hazardous waste and (3) to avoid escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products to the ground or surface waters or atmosphere. All of the waste handling areas are concrete paved areas, prohibiting migration of contaminants to underlying soils. However, in the unlikely event of suspected soil contamination as a result of a spill of <u>any</u> hazardous waste or material, samples will be taken and analyzed. Any contaminated soils will be excavated and disposed of at a hazardous waste disposal facility.

(iii) Maximum Waste Inventory

The maximum inventory of hazardous waste stored on-site at any given time during the operating life of the plant is 450 drums, the process design capacity for the drums storage facility.

(iv) Inventory Removal and Disposal or Decontamination of Equipment

(a) Drummed waste - full drums of solid waste will be transported for land disposal. Drums of liquid waste will be transported to a treatment facility (incineration).

Empty drums - any empty drums on-site which have residual hazardous waste will be rinsed with an appropriate solvent. The resultant wash waste will be recovered in the solvent still.

Leaking drums - any leaking drums of waste will be enclosed in an overpack drum for transport to the appropriate facility.

(b) Equipment decontamination - after all recyclable solvents have been treated, all piping in connection with the solvent still will be disconnected and dismantled. Any residual materials will be allowed to

drain and to be collected, then pipes will be allowed to air dry. The still bottoms collection tank and drumming pit will be steam-cleaned, with contaminated wash waters contained, collected and transported in drums or tank truck to the off-site treatment facility.

Fork lifts, shovels and squeeges used to move drums or handle waste will be steam-cleaned as necessary. Any other equipment, gloves, cloths, etc., which may be contaminated beyond the potential for cleaning, will be drummed and disposed of at the licensed disposal facility.

(c) Storage area decontamination - the hazardous waste drum storage area and, as needed, the surrounding drum handling areas, will be steam-cleaned of any residual waste material. The wash waters will be collected and transported by drums or tank truck to the off-site treatment facility.

(d) The areas surrounding, and including, the Banbury mixers, where waste is generated, will be steam-cleaned with wash waters collected and treated off-site.

(e) The sump in the electroplating portion of the plant,

where other wastes are generated, will be cleaned of any residual waste, and steam-cleaned, if necessary.

(f) Approximately 825 gallons of wash water and residue are anticipated to be generated during the container storage, solvent still, Banbury mixers, and electroplating sump decontamination processes.

(g) The off-site treatment and disposal facilities to which waste will be taken, are as follows:

Disposal

CECOS International, Inc.
Williamsburg, OH
EPA ID# OHD087433744

Incineration

Ross Incineration Services
Grafton, OH
EPA ID# OHD048415665

Treatment (Liquids)

Systech Liquid Treatment Corporation
Hillard, OH
EPA ID# OHD081290611

(h) Transporters of the waste will be:

Acme Liquid Waste
Westerville, OH
EPA ID# OHD000772723

CECOS (Cer) Transport
Cincinnati, OH
EPA ID# OHD087433744

Ross Transportation Services
Grafton, OH
EPA ID# OHD980614374

(v) Schedule for Closure

Within 90 days after generation of the final volume of process hazardous waste, final closure will be initiated. Notification to the appropriate agencies will take place 90 days before the generation of final volume of process hazardous waste. Completion of closure will be within 180 days of final closure initiation. The proposed schedule for closure is shown in Figure 12.

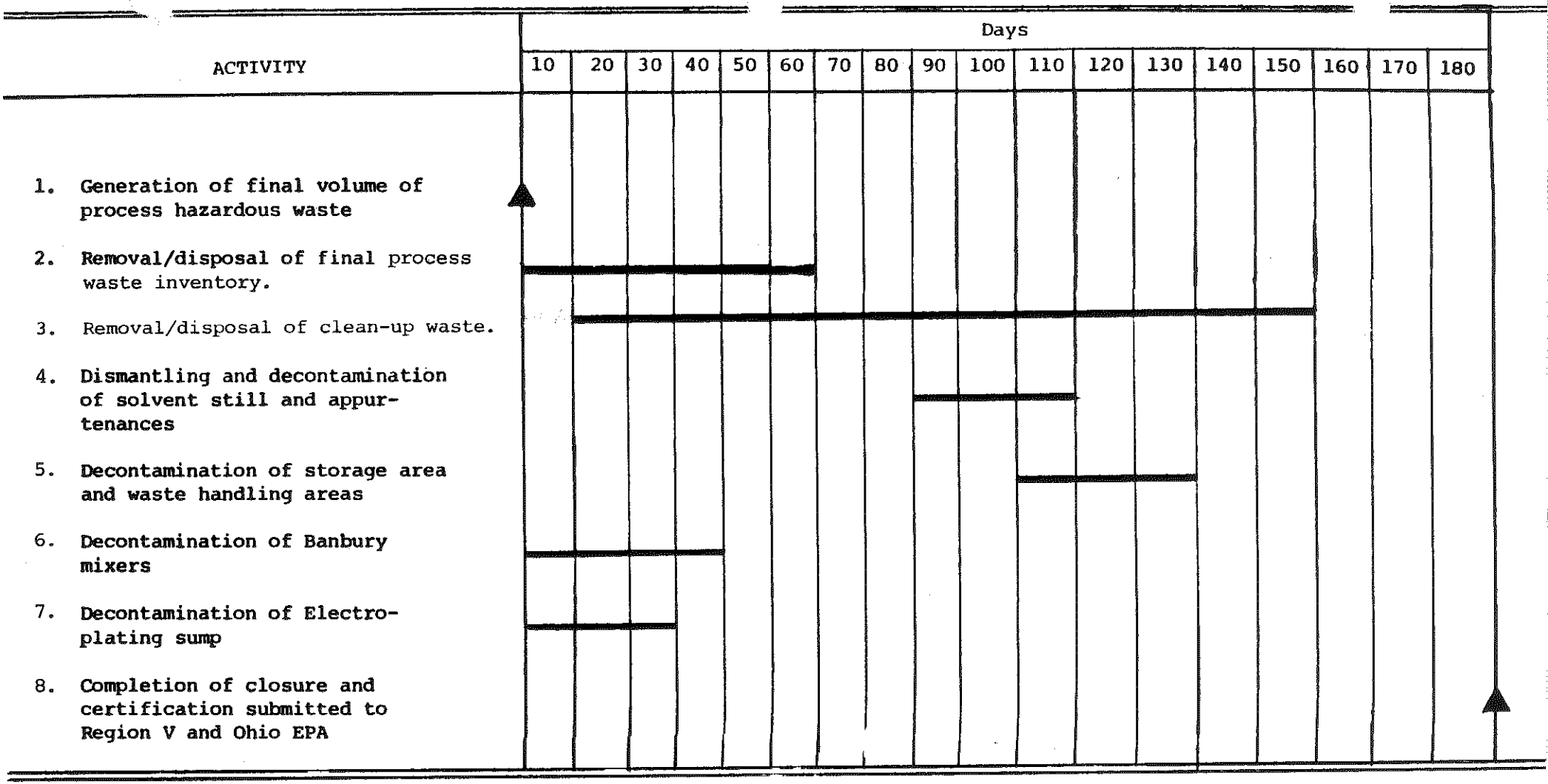
(vi) Post-closure Plan

Post-closure care will not be needed because no waste will be left on-site.

(vii) Closure Cost Estimate

Table 2, page 108, itemizes the costs associated with closure of the hazardous waste storage area.

The cost estimates will be revised upon any change in the closure plan. The cost estimates will be revised at least once annually on May 19, using the inflation factor derived from the annual Implicit Price Deflator for Gross National Product as publised by the U.S. Department of Commerce in its Survey of Current Business.



CLOSURE SCHEDULE

NOTE: 1. Disposal of final waste inventory includes the hazardous wastes generated due to the cleanup process.

2. This process continues throughout most of the closure schedule.

FIGURE 12

DATE: February 4, 1983
Revision I

Table 2 Closure Cost Estimate

	Drums	Cost Per Per Drum	Labor @ $20.00/Hr	Materials	Total
Waste Inventory Removal	450	non-			$26,550
Clean-up Wastes	15	non-			885
Still Clean-up			$7,200	$1,800	9,000
Plating Area Clean-up			2,000	500	2,500
Banbury Mixer Clean-up			2,880	500	3,380
Storage Area & Environs Clean-up			9,000	1,000	10,000
Sub-Total					$52,315
10% Contingency					5,232
TOTAL					$57,547

(14) Deed Notice

Notice in the deed and notice to the local land authorities are not required because no waste will be left on site after closure.

(15) Closure Cost - Financial Assurance

Following is the submission to comply with the financial test mechanism for assuring closure costs.

(i) The prescribed letter signed by Borden's chief accounting officer. (Pages 111 thru 115).

(ii) The prescribed special report from Borden's certified public accountant, having reviewed the letter in (i). (Page 116).

(iii) Borden's 1982 annual report, including a certified public accountant's report on the examination of Borden's financial statements (see page 42 of Annual Report).

Please note that the closure cost has been revised to more specifically address only the hazardous waste portion of the CCF plant. The revised cost estimate is much lower than that reflected in this documentation. See Section (13).

DATE: July 18, 1983
REVISION NO. 1

BORDEN INC
180 EAST BROAD STREET, COLUMBUS, OHIO 43215

June 7, 1983

USEPA, Region V
111 West Jackson Blvd.
Chicago, IL 60604

Attn: 5HW-TVB

Re: Hazardous Waste Closure Cost Assurance and
Non-Sudden Liability Insurance
Borden Chemical, Cincinnati, OH OHD068932011
Columbus Coated Fabrics, Columbus, OH OHD004294351
Borden Chemical, Portage, MI MID092950195

Dear Sir:

I am the chief accounting officer of Borden Inc., 180 East Broad St., Columbus, Ohio 43215. This letter is in support of this firm's use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in Subpart H of 40 CFR Parts 264 and 265.

The owner or operator identified above is the owner or operator of the following facilities for which liability coverage is being demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265:

EPA ID#OHD068932011
Borden Chemical
Printing Ink Division
Borden Inc.
630 Glendale-Milford Rd.
Cincinnati, OH 45215

EPA ID#LAD003913449
Borden Chemical
Petrochemical Division
Borden Inc.
P.O. Box 427
Geismar, LA 70734

[The owner or operator identified above (Borden Inc.) obtained interim status for the following facility in November 1980, then sold the facility in September, 1981. Shortly before the sale of the property Borden Inc. chose to undertake the closure of a surface impoundment storage facility at the site. Although Borden Inc. does not own the site, financial requirements for the closure of the surface impoundment are maintained until final closure

under interim status requirements is accomplished.]

EPA ID#NCD001725464
Borden Chemical
Smith-Douglass Division
Borden Inc.
P.O. Box 1577
Kinston, NC 28501

1. The owner or operator identified above owns or operates the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility:

EPA #OHD068932011
Borden Chemical
Printing Ink Division
Borden Inc.
630 Glendale-Milford Rd.
Cincinnati, OH 45215
Closure Cost Est. $720,800
Post-Closure Est. $53,000

EPA ID #MID092950195
Borden Chemical
Printing Ink Division
Borden Inc.
8925 Shaver Rd.
Portage, MI 49002
Closure Cost Est. $42,400

EPA #WAD052581568
Borden Chemical
Adhesives & Chemical Div.
Borden Inc.
P.O. Box 428
Kent, WA 98031
Closure Cost Est. $106,000

EPA ID #ORD003938628
Borden Chemical
Adhesives & Chemical Div.
Borden Inc.
P.O. Box 1028
LaGrande, OR 97850
Closure Cost Est. $106,000

EPA ID #OHD004294351
Borden Chemical
Columbus Coated Fabrics
Borden Inc.
1280 N. Grant Ave.
Columbus, OH 43216
Closure Cost Est. $61,000

2. The owner or operator identified above guarantees, through the corporate guarantee specified in Subpart H of 40 CFR Parts 264 and 265, the closure or post-closure care of the following facilities owned or operated by its subsidiaries. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility: None

3. In States where EPA is not administering the financial requirements of Subpart H of 40 CFR Parts 264 and 265, this

owner or operator is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR Parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

EPA ID#FLT130010069
Borden Chemical
Printing Ink Division
Borden Inc.
5004 N. Combee Rd.
Lakeland, FL 33801
Closure Cost Est. $21,200

EPA ID#GAD075880310
Borden Chemical
Printing Ink Division
Borden Inc.
587 Whitehall St., S.W.
Atlanta, GA 30303
Closure Cost Est. $21,200

EPA #GAD070327267
Borden Chemical
Printing Ink Division
Borden Inc.
1711 Osbourne St.
St. Marys, GA 31558
Closure Cost Est. $21,200

EPA #GAD042104232
Borden Chemical
Printing Ink Division
Borden Inc.
1021 Industrial Park Dr.
Marietta, GA 30062
Closure Cost Est. $42,400

EPA ID #TXD001865609
Borden Chemical
Adhesives & Chemical Div.
Borden Inc.
100 W. Borden Dr.
Diboll, TX 75941
Closure Cost Est. $137,800

EPA ID #MTD053041927
Borden Chemical
Adhesives & Chemical Div.
Borden Inc.
3670 Grant Creek Rd.
Missoula, MT 59801
Closure Cost Est. $111,300

EPA ID #CAD009536194
Borden Chemical
Adhesives & Chemical Div.
Borden Inc.
6455 E. Canning St.
Los Angeles, CA 90040
Closure Cost Est. $42,400

EPA #CAD086167384
Borden Chemical
Adhesives & Chemical Div.
Borden Inc.
41100 Boyce Rd.
Fremont, CA 94538
Closure Cost Est. $212,000
Post -Closure Est. $53,000

EPA ID #CAD990662546
Borden Chemical
Printing Ink Division
Borden Inc.
1100 Vail Ave
Montebello, CA 90640
Closure Cost Est. $21,200

EPA ID#ILD064017940
Borden Chemical
Printing Ink Divison
Borden Inc.
2445 Production Dr.
St. Charles, IL 60174
Closure Cost Est. $42,400

EPA ID#ILD005158548
Borden Chemical

EPA ID#ILD074367434
Borden Chemical

Thermoplastics Div.
Borden Inc.
P.O. Box 27
Illiopolis, IL 62539
Closure Cost Est. $106,000

Adhesives & Chemical Division
Borden Inc.
1829 S. 54th Ave.
Cicero, IL 60650
Closure Cost Est. $42,400

4. The owner or operator identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 CFR Parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility:

EPA ID#MAD001381912
Borden Chemical
Vernon Plastics Div.
Borden Inc.
Shelly Rd-Ward Hill
Haverhill, MA 01830
Closure Cost Est. $21,200

EPA ID#MAD990886673
Borden Chemical
Thermoplastics Division
Borden Inc.
511 Lancaster St.
Leominster, MA 01453
Closure Cost Est. $132,500

EPA ID #LAD003913449
Borden Chemical
Petrochemical Div.
Borden Inc.
P.O. Box 427
Geismar, LA 70734
Closure Cost Est. $3,779,000

The owner or operator is required to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this owner or operator ends on December 31. The figures for the following items marked with an asterisk are derived from this owner's or operator's independently audited year-end financial statements for the latest completed fiscal year, ending December 31, 1982.

		(in million $)
1.	Sum of Closure & Post-Closure Cost Estimates	5.8
2.	Amount of Annual Aggregate Liability Coverage	6.0
3.	Sums of 1 & 2	11.8
4.	Total Liabilities	1248.4
5.	Tangible Net Worth	1148.8
6.	Net Worth	1341.3

7.	Current Assets	1082.3
8.	Current Liabilities	604.4
9.	Net Working Capital	477.9
10.	Sum of Net Income plus Depreciation, Depletion, and Amortization	265.7
11.	Total Assets in US	2060.2
12.	Is line 5 at least 10 million?	Yes
13.	Is line 5 at least 6 times line 3?	Yes
14.	Is line 9 at least 6 times line 3?	Yes
15.	Are at least 90% of assets in U.S.? If not, line 16	No
16.	Is line 11 at least 6 times line 3?	Yes
17.	Is line 4 divided by line 6 less than 2.0?	Yes
18.	Is line 10 divided by line 4 greater than 0.1?	Yes
19.	Is line 7 divided by line 8 greater than 1.5?	Yes

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151(g), with the exceptions:

(1) that I am the chief accounting officer and not the chief financial officer, and

(2) that an explanation has been added regarding the Kinston, N.C. facility to be closed,

as such regulations were constituted on the date shown immediately below.

[Signature] _____
[Name] L. O. Doza
[Title] Vice President and General Controller
[Date] June 7, 1983

DATE: July 18, 1983
REVISION NO: 1

Price Waterhouse

180 EAST BROAD STREET
COLUMBUS, OHIO 43215
614 221-8500

May 24, 1983

Mr. L. O. Doza
Vice President and
General Controller
Borden, Inc.
180 East Broad Street
Columbus, Ohio 43215

Dear Mr. Doza:

As you requested and as required by amended Title 40 of the Code of Federal Regulations Part 264 - Standards For Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities, Subpart H-Financial Requirements; we have compared the data listed below, which we understand will be included in your letters to various Environmental Protection Agencies, to the December 31, 1982 audited consolidated financial statements of Borden, Inc.

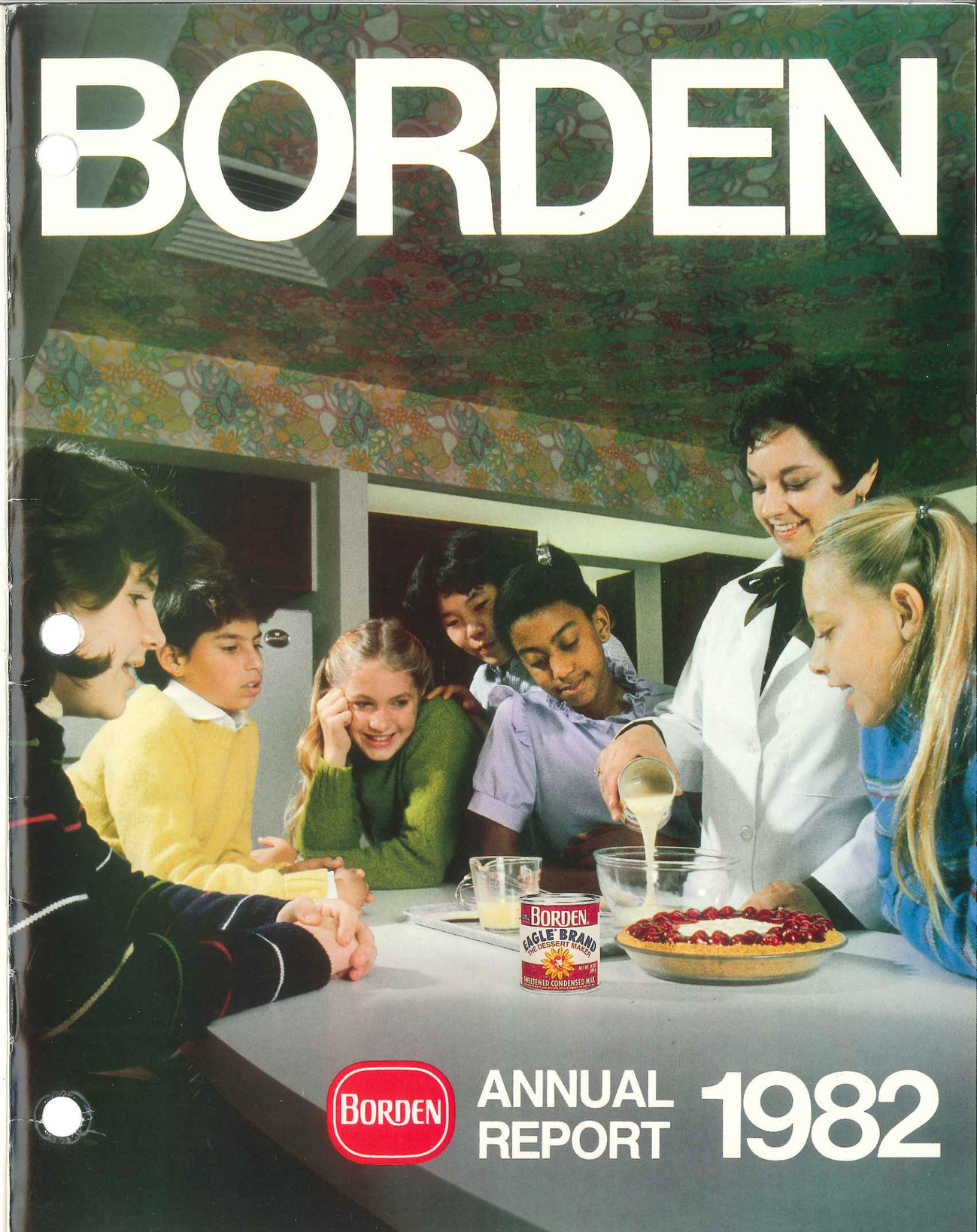
Line No.	Description	Dollar Amount (in millions)
4	Total liabilities	$1,248.4
5	Tangible net worth	1,148.8
6	Net worth	1,341.3
7	Current assets	1,082.3
8	Current liabilities	604.4
9	Net working capital (line 7 minus line 8)	477.9
10	The sum of net income plus depreciation, depletion and amortization	265.7
11	Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.)	2,060.2

Based upon this comparison, we have determined that the above data was derived from the December 31, 1982 audited consolidated financial statements of Borden, Inc. and in performing said comparison, no matters came to our attention which caused us to believe that the above data should be adjusted.

Price Waterhouse

BORDEN, INC.
277 PARK AVENUE / NEW YORK, N.Y. 10172

BORDEN



BORDEN ANNUAL REPORT 1982

On the cover: 1982 was the 125th anniversary year of Borden, Inc., the company founded by Gail Borden, Jr. to commercialize his most successful invention, condensed milk. Eagle Brand sweetened condensed milk has been the market leader since its introduction in 1857 as a "pure and safe milk for infants," but its greatest growth has come in its positioning as "The Dessert Maker." Annie Watts, manager of the Borden Kitchens, demonstrates the product's ease of use to a group of students from the Columbus School for Girls in Columbus, Ohio.

Borden, Inc. will furnish to any shareholder, without charge, a copy of its most recent annual report on Form 10-K, as filed with the United States Securities and Exchange Commission.

Written requests should be directed to:
Borden, Inc.
Attn. Mr. R. G. Tritsch
Secretary
277 Park Avenue
New York, New York 10172

Executive Offices
Borden, Inc.
277 Park Avenue
New York, New York 10172
Telephone No. (212) 573-4000

Administrative Headquarters
180 East Broad Street
Columbus, Ohio 43215
Telephone No. (614) 225-4000

Annual Meeting
The Annual Meeting will be held on Friday, April 22, 1983, beginning at 11:00 a.m. in the Hunterdon Theatre, Church Street and Route 31, Flemington, New Jersey.

Independent Accountants
Price Waterhouse
180 East Broad Street
Columbus, Ohio 43215

Common Stock Agencies
Transfer Agent & Registrar
Dividend Disbursing Agent
Chemical Bank
55 Water Street
New York, New York 10041

Debenture Trustees
4⅜% Sinking Fund Debentures
The Chase Manhattan Bank, N.A.
New York, New York 10081

5¾% Sinking Fund Debentures
Morgan Guaranty Trust Company of New York
New York, New York 10015

8½% Sinking Fund Debentures
Bank of America, N.T. & S.A.
San Francisco, California 94137

9⅜% Sinking Fund Debentures
The Bank of New York
New York, New York 10015

Exchange Listings
Common Stock (Ticker Symbol-BN)
New York Stock Exchange
The Common Stock is currently listed on exchanges in Basel, Geneva, Lausanne and Zurich, Switzerland.

New York Stock Exchange
4⅜% Sinking Fund Debentures, due 1991
5¾% Sinking Fund Debentures, due 1997
8½% Sinking Fund Debentures, due 2004
9⅜% Sinking Fund Debentures, due 2009

Date and State of Incorporation
April 24, 1899-New Jersey

Printed in U.S.A.

Financial Highlights

(In thousands except per share and percentage amounts)

	December 31 1982	December 31 1981	Percent Change
Operating Results (for the year)			
Net sales	**$4,111,277**	$4,415,174	− 6.9
Income taxes	**89,000**	79,500	+11.9
Net income	**165,855***	159,939	+ 3.7
Net income per common share and equivalent:			
Primary	**5.81**	5.45	+ 6.6
Fully diluted	**5.62**	5.20	+ 8.1
Dividends:			
Common share	**2.17¾**	2.01¼	+ 8.2
Preferred series B share	**1.32**	1.32	
Total dividends	**62,068**	59,110	+ 5.0
Capital expenditures	**240,104**	247,500	− 3.0
Financial Position (at year-end)			
Working capital	**$ 477,955**	$ 519,094	− 7.9
Current ratio	**1.8:1**	1.9:1	
Long-term debt-to-equity percent	**32%**	33%	
Shareholders' equity	**1,341,333**	1,318,755	+ 1.7
Equity per common share	**46.99**	44.98	+ 4.5
Common shares outstanding	**28,531**	29,298	− 2.6
Return on average shareholders' equity	**12.6%**	12.6%	

**Includes a net after-tax gain of $28.0 million or $.98 per share from the sales of assets.*

CONTENTS

Message to Shareholders and Employees

There are few absolutes in business. The performance of a company is always relative, and the choice of criteria determines the result.

Measured against our performance in the prior year, we had a fair year in 1982. Measured against the performance of other companies in the consumer products and chemical industries, we had a good year, and measured against the performance of the economy as a whole, we had an excellent year.

Most rewarding about our record 1982 results, they confirmed the basic soundness of our redeployment program, which is helping to finance a $1.5 billion expansion of our assets. We began the program in 1980, and by the start of 1982 had completed its divestiture phase, shedding low-return businesses or those that no longer fitted our future. Proceeds from the divestitures were largely reinvested in the growth areas of consumer products and chemicals. We also used part of the proceeds to lower our debt, to make acquisitions, to finance ongoing working capital, and to repurchase several million shares—steps that increased our liquidity, reduced our need to borrow at high interest rates, and improved our earnings per share. Without benefit of the redeployment program, our earnings in 1982 would have been substantially under those of a year earlier, our prospects for 1983 and beyond would have darkened, and the market value of our stock almost certainly would have suffered.

Of our three operating divisions, the Consumer Products Division has profited the most to date from our redeployment program. We have unburdened it of low-margin, commodity-oriented operations in sugar refining and bulk cheese; strengthened it with acquisitions and capital projects in snacks, pasta, and non-food home and professional products; restructured its organization, and increased its marketing and research and development expenditures. Largely because of these moves, its operating income in 1982 was up more than 15% from the prior year, and income from ongoing operations climbed 27%.

The redeployment program has enabled us to enhance the geographic and product diversity of our International Division, and this diversity was a key factor in its strong performance despite a virtually worldwide recession. Operating income increased almost 27%. Numerous but relatively small operations, now spread over 27 countries, give the division exceptional flexibility in responding to economic conditions.

Our chemical plants have been brought to peak levels of efficiency through major capital investment financed largely from redeployment, firmly positioning the Chemical Division to benefit from economic recovery. The division, however, was unable to realize the full potential of the modernized and expanded facilities in 1[illegible] the deep recession that affected most industrial markets, especially the major markets of housing and automobiles, substantially reduced demand for our principal chemical products. In addition, the division's costs for natural gas, its principal feedstock, increased some $36 million from 1981, owing to the scheduled expiration of a low-cost contract. Chemical Division income declined sharply, but with help from manufacturing efficiencies and other cost controls it improved steadily throughout the year; operating income in the fourth quarter accounted for almost 38% of total income for the year.

The underlying purpose of our [illegible]on program is to improve our return on shareholders' equity and thereby increase the wealth of our shareholders. Our objective is a return of at least 15% by 1985, and 18% by the end of the 1980s. To focus on this objective, we established a ROSE program, so-named for the acronym for "Return On Shareholders' Equity." Each Borden profit center worldwide has been given details of the ROSE strategy, and uses it to measure performance relative to all other profit centers. In the absence of a founder, name, or trademark that is common to all our worldwide operations, ROSE has become the one theme that is universally Borden and uniquely Borden. As such, it has become the most important component of our "company culture," which has been defined as an amalgam of the "beliefs, mythology, values and rituals" that, even more [illegible]s products, differentiates one company from another. Many observers of business believe that the most successful companies in the 80s will be those whose strategies are compatible with their company cultures. Our ROSE strategy clearly meets that requirement.

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In early October, we informed our shareholders and the financial community that we expected our per share earnings in 1983 to grow by 12% to 15%. Since that projection, several major events have occurred. The first, which is favorable, is the settlement in November of our suit against Texaco, Inc., the details of which are discussed on Page 15 of this Report. The second, which is unfavorable, is the "maxi" devaluation of the Brazilian cruzeiro in February, 1983. Atop these is the widening range of estimates by economists of the relative strength of the recovery, further complicated by a sharp downward trend in world oil prices. After adding this new mix of favorable, unfavorable, and uncertain factors to those already taken into account in arriving at our projection of last October, we now foresee our reported earnings per share, on a fully diluted basis, increasing over 15% from 1982 to 1983.

***

One of the great rewards for present management has been the enthusiastic response of our employees to the restructuring program. This program represents a major change in the Company's direction and pace, requiring employees at all levels to take on added workloads and responsibilities. They have done so willingly, with imagination, skill and energy. We are grateful.

We are also grateful to our shareholders for their generous endorsement of management's actions and policies. Our retirees were most supportive, serving as enthusiastic boosters of Borden products and as goodwill ambassadors for the Company. The Board of Directors was a source of strength throughout the year, consistently diligent and constructive in all matters brought before it.

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John J. O'Connor, formerly an Executive Vice President and president of the International Division, was elected to the Board of Directors as Vice Chairman, effective January 1, 1983. He joined the export department of the Chemical Division in 1947, and subsequently served as director superintendent of our chemical subsidiary in Brazil, as vice president of the Chemical Division in charge of international operations, and as president of the Chemical Division. He became president of the International Division upon its formation in 1968, and was elected an Executive Vice President and appointed a member of the Office of the Chairman in 1979.

I have known Jack O'Connor since he joined the Company. We worked closely together in the Chemical Division, where I came to appreciate his qualities as a manager and as a person. His sound judgment and wealth of experience in international business make him a valued addition to the Board.

E. J. Sullivan

Eugene J. Sullivan
Chairman and
Chief Executive Officer

Borden Consumer Products

	1982	1981
Sales (in Millions)	**$2,659.9**	$2,795.5
% of Total Sales	**65%**	63%
Operating Income (in Millions)	**$ 181.3**	$ 157.0
% of Total Income from Operations	**62%**	51%

The Consumer Products Division, the company's largest division, had by far its most profitable year. Operating income climbed to $181.3 million, 15.5% above the previous high of $157.0 million in 1981, despite the loss of $14.6 million in profits from discontinued operations. Income from ongoing operations was up $38.4 million, or 27.0%. All six of the division's groups reported record results. The gain in profits reflected stronger emphasis on higher-margin branded products, improvement in market shares, more focused advertising and promotion, organizational efficiencies, and generally more favorable raw-ingredient costs.

Sales declined 4.8%, to $2.66 billion from $2.80 billion in 1981, because of discontinued operations. Sales from ongoing operations, however, increased $78 million, or 3%.

During the year, the division assumed responsibility for the Puerto Rican and Canadian consumer products operations of the International Division. Sales and operating income for 1981 have been restated to reflect the transfer.

GROCERY PRODUCTS GROUP

The Grocery Products Group markets a broad range of brands through brokers and warehouse distribution systems. Five profit centers manage (except for pasta) all domestic non-perishable grocery products, cheese, confections, and all Canadian consumer products.

For the year, the group posted record income, up 28% from 1981. Sales were almost level with the prior year, owing to lower commodity costs and selling prices for several products and the full-year effect of the company's withdrawal from its high-volume commodity cheese business in 1981.

Desserts and Beverages, the profit center responsible for such key products as Eagle Brand sweetened condensed milk, Cremora non-dairy creamer, ReaLemon reconstituted juices, Wyler drink mixes, Wyler bouillon, and None Such mince meat, achieved a 58% gain in income. Four of the six products had percentage increases in volume well above those of their industry categories. The company's Number One market position was maintained in condensed milk, reconstituted lemon juice, bouillon, and mince meat.

Eagle Brand sweetened condensed milk, the company's original product, posted significant volume gains despite the entry of new competition. It benefited from heavy advertising support of its positioning as "the Dessert Maker." Cremora, which has been under intense competitive pressure from low-priced generic products, was stabilized. A low-sodium bouillon that positioned the product in the fast-growing diet/health sector was successfully introduced under the Lite-line brand late in the year.

Hi-Protein milk is an exclusive Borden product, positioned in the fast-growing low-fat category.

In the drink-mix category, Borden increased its overall market share by nearly a third, thereby substantially strengthening its Number Two position. Income was up significantly. A line of drink mixes using the recently approved artificial sweetener, aspartame, was successfully tested during the year for introduction in 1983; it provides Borden with an entry in the "no sugar" category, which is expected to be a major growth business in coming years.

Main Meals, the group's profit center responsible for Borden and Lite-line cheese products, Bama jams and jellies, Snow clam products, and Kava instant coffee, had an excellent year, with income up 21%. The cheese operations showed a gain of more than 70% in income, the result of focusing exclusively on sliced process cheese following their withdrawal from the low-margin bulk cheese business in 1981.

Lite-line became more firmly established as the leading brand of cheese in the diet/health category. Market share grew by more than a third, bolstered by new-product introductions, market rollout, and heavy advertising support. Four new flavors of Lite-line cheese were introduced nationally. Cheese Twin, a substitute cheese food, rolled out to markets covering almost 60% of the population, capturing what is believed to be the Number One position in cheese substitutes.

Bama jams, jellies and preserves maintained brand leadership in their sales area,


FAMILY SIZE
Creamettes
COOKS IN 7 MINUTES
MACARONI


LASAGNA
Creamette
Italian Style
BORDEN
ENRICHED
WHITE
MELBA
KAVA
INSTANT COFFEE
90%
LESS ACID
Pudding Bars
Frozen Pudding On A Stick
CHOCOLATE
BORDEN
EGG
NOG